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 <211> 1003
 <212> PRT
 <213> Homo sapiens

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 Lys Ala Arg Leu Ala Ser Gln Glu Ala Glu Leu Gln Leu Arg Asn His
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 Asp Ala Glu Ala Leu Ile Thr Lys Ile Gly Leu Gln Thr Glu Lys Val
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 Ser Arg Glu Lys Thr Ile Ala Asp Ala Glu Glu Arg Lys Val Thr Ala
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 Ile Gln Thr Glu Val Phe Gln Lys Gln Arg Glu Cys Glu Ala Asp Leu
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 145 150 155 160
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 Ile Ala Val Thr Asn Val Thr Ala Ala Val Met Val Leu Leu Ala Pro
 180 185 190
 Arg Gly Arg Val Pro Lys Asp Arg Ser Trp Lys Ala Ala Lys Val Phe
 195 200 205
 Met Gly Lys Val Asp Asp Phe Leu Gln Ala Leu Ile Asn Tyr Asp Lys
 210 215 220
 Glu His Ile Pro Glu Asn Cys Leu Lys Val Val Asn Glu His Tyr Leu
 225 230 235 240
 Lys Asp Pro Glu Phe Asn Pro Asn Leu Ile Arg Thr Lys Ser Phe Ala
 245 250 255
 Ala Ala Gly Leu Cys Ala Trp Val Ile Asn Ile Ile Lys Phe Tyr Glu
 260 265 270
 Val Tyr Cys Asp Val Glu Pro Lys Arg Gln Ala Leu Ala Gln Ala Asn
 275 280 285
 Leu Glu Leu Ala Ala Ala Thr Glu Lys Leu Glu Ala Ile Arg Lys Lys
 290 295 300
 Leu Val Val Ser Ala Asn Tyr Asp Ile Glu Lys Ser Glu Lys Ile Arg
 305 310 315 320
 Trp Gly Gln Ser Ile Lys Ser Phe Glu Ala Gln Glu Lys Thr Leu Cys
 325 330 335
 Gly Asp Val Leu Leu Thr Ala Ala Phe Val Ser Tyr Val Gly Pro Phe

4803

770	775	780
Trp Val Glu Ser Glu Cys Pro Glu Lys Glu Lys Leu Pro Gln Glu Trp		
785	790	795
Lys Lys Lys Ser Leu Ile Gln Lys Leu Ile Leu Leu Arg Ala Met Arg		800
	805	810
Pro Asp Arg Met Thr Tyr Ala Leu Arg Asn Phe Val Glu Glu Lys Leu		815
	820	825
Gly Ala Lys Tyr Val Glu Arg Thr Arg Leu Asp Leu Val Lys Ala Phe		830
	835	840
Glu Glu Ser Ser Pro Ala Thr Pro Ile Phe Phe Ile Leu Ser Pro Gly		845
	850	855
Val Asp Ala Leu Lys Asp Leu Glu Ile Leu Gly Lys Arg Leu Gly Phe		860
865	870	875
Thr Ile Asp Ser Gly Lys Phe His Asn Val Ser Leu Gly Gln Gly Gln		880
	885	890
Glu Thr Val Ala Glu Val Ala Leu Glu Lys Ala Ser Lys Gly Gly His		895
	900	905
Trp Val Ile Leu Gln Asn Val His Leu Val Ala Lys Trp Leu Gly Thr		910
	915	920
Leu Glu Lys Leu Leu Glu Arg Phe Ser Gln Gly Ser His Arg Asp Tyr		925
	930	935
Arg Val Phe Met Ser Ala Glu Ser Ala Pro Thr Pro Asp Glu His Ile		940
945	950	955
Ile Pro Gln Gly Leu Leu Glu Asn Ser Ile Lys Ile Thr Asn Glu Pro		960
	965	970
Pro Thr Gly Met Leu Ala Asn Leu His Ala Ala Leu Tyr Asn Phe Asp		975
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Gln Val Arg Lys Arg Ser Arg Leu Gly Arg Gln		990
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<210> 5619
 <211> 1219
 <212> DNA
 <213> Homo sapiens

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<210> 5620

<211> 333

<212> PRT

<213> Homo sapiens

<400> 5620

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			20					25					30		
Glu	Asn	Arg	Glu	Asp	Ile	Ser	Gln	Tyr	Gly	Ile	Ala	Arg	Phe	Phe	Thr
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Glu	Tyr	Phe	Asn	Ser	Val	Cys	Gln	Gly	Thr	His	Ile	Leu	Phe	Arg	Glu
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Phe	Ser	Phe	Val	Gln	Ala	Thr	Pro	His	Asn	Arg	Val	Ser	Phe	Leu	Arg
65					70				75					80	
Ala	Phe	Trp	Arg	Cys	Phe	Arg	Thr	Val	Gly	Lys	Asn	Gly	Asp	Leu	Leu
			85					90					95		
Thr	Met	Lys	Glu	Tyr	His	Cys	Leu	Leu	Gln	Leu	Leu	Cys	Pro	Asp	Phe
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Pro	Leu	Glu	Leu	Thr	Gln	Lys	Ala	Ala	Arg	Ile	Val	Leu	Met	Asp	Asp
	115						120					125			
Ala	Met	Asp	Cys	Leu	Met	Ser	Phe	Ser	Asp	Phe	Leu	Phe	Ala	Phe	Gln
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Ile	Gln	Phe	Tyr	Tyr	Ser	Glu	Phe	Leu	Asp	Ser	Val	Ala	Ala	Ile	Tyr
145					150				155					160	
Glu	Asp	Leu	Leu	Ser	Gly	Lys	Asn	Pro	Asn	Thr	Val	Ile	Val	Pro	Thr
			165				170						175		
Ser	Ser	Ser	Gly	Gln	His	Arg	Gln	Arg	Pro	Ala	Leu	Gly	Gly	Ala	Gly

	180		185		190										
Thr	Leu	Glu	Gly	Val	Glu	Ala	Ser	Leu	Phe	Tyr	Gln	Cys	Leu	Glu	Asn
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Leu	Cys	Asp	Arg	His	Lys	Tyr	Ser	Cys	Pro	Pro	Pro	Ala	Leu	Val	Lys
	210					215					220				
Glu	Ala	Leu	Ser	Asn	Val	Gln	Arg	Leu	Thr	Phe	Tyr	Gly	Phe	Leu	Met
225				230						235				240	
Ala	Leu	Ser	Lys	His	Arg	Gly	Ile	Asn	Gln	Ala	Leu	Gly	Lys	Ser	Glu
			245					250					255		
Leu	Ser	Ser	Arg	Gln	Pro	Leu	Leu	Pro	His	Asn	Thr	Gly	Ser	Ser	Trp
		260						265					270		
Pro	Leu	Leu	Ala	Thr	Arg	Leu	Gln	Arg	Gly	Arg	Gly	Ile	Thr	Ile	Ser
	275					280						285			
Ala	Leu	Thr	Ser	Gln	Gly	Arg	Thr	Gln	Ser	Gln	Gly	Ala	Gly	Ile	Trp
	290					295					300				
Arg	Gln	Asn	Met	Ala	Leu	Thr	His	Ser	His	Gly	Arg	Gly	Gln	Pro	Ser
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<210> 5621
 <211> 456
 <212> DNA
 <213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

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35 40 45
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<211> 357
<212> DNA
<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

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35 40 45
Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly
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Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
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Val Asp Ile Val Asp Ala Lys Leu
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<211> 1017
<212> DNA
<213> Homo sapiens

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<210> 5626

<211> 339

<212> PRT

<213> Homo sapiens

<400> 5626

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			20					25					30		
Val	Phe	Pro	Phe	Lys	Pro	Pro	Gln	Arg	Ile	Glu	Ala	Arg	Thr	His	Leu
			35				40					45			
Gln	Leu	Gly	Ser	Val	Leu	Tyr	His	His	Thr	Lys	Asn	Ser	Glu	Gln	Ala
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Phe	Glu	Asp	Val	Lys	Phe	Glu	Ala	Ala	Ser	Leu	Leu	Ser	Glu	Leu	Tyr
			85					90					95		
Cys	Gln	Glu	Asn	Ser	Val	Asp	Ala	Ala	Lys	Pro	Leu	Leu	Arg	Lys	Ala
			100					105					110		
Ile	Gln	Ile	Ser	Gln	Gln	Thr	Pro	Tyr	Trp	His	Cys	Arg	Leu	Leu	Phe

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Tyr Thr Arg Ala Leu Phe Leu Leu Ser Lys Gly Met Leu Leu Leu Met		
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Glu Arg Lys Leu Gln Glu Val His Pro Leu Leu Thr Leu Cys Gly Gln		
180	185	190
Ile Val Glu Asn Trp Gln Gly Asn Pro Ile Gln Lys Glu Ser Leu Arg		
195	200	205
Val Phe Phe Leu Val Leu Gln Val Thr His Tyr Leu Asp Ala Gly Gln		
210	215	220
Val Lys Ser Val Lys Pro Cys Leu Lys Gln Leu Gln Gln Cys Ile Gln		
225	230	235
Thr Ile Ser Thr Leu His Asp Asp Glu Ile Leu Pro Ser Asn Pro Ala		
245	250	255
Asp Leu Phe His Trp Leu Pro Lys Glu His Met Cys Val Leu Val Tyr		
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Leu Val Thr Val Met His Ser Met Gln Ala Gly Tyr Leu Glu Lys Ala		
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Gln Lys Tyr Thr Asp Lys Ala Leu Met Gln Leu Glu Lys Leu Lys Met		
290	295	300
Leu Asp Cys Ser Pro Ile Leu Ser Ser Phe Gln Val Ile Leu Leu Glu		
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Gln Glu Ile		

<210> 5627

<211> 1401

<212> DNA

<213> Homo sapiens

<400> 5627

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 900
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 1140
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 1200
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 1260
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<210> 5628

<211> 299

<212> PRT

<213> Homo sapiens

<400> 5628

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Leu	Asp	Leu	Leu	Phe	Asp	Arg	Gln	Asp	Gly	Ile	Leu	Arg	His	Val	Glu
		20					25						30		
Leu	Gly	Glu	Gly	Trp	Gly	His	Val	Lys	Asp	Gln	Val	Leu	Pro	Asn	Pro
		35				40						45			
Asp	Ser	Asp	Asp	Phe	Leu	Ser	Ser	Ile	Leu	Gly	Ser	Gly	Asp	Ser	Leu
	50					55						60			
Pro	Ser	Ser	Pro	Leu	Trp	Ser	Pro	Glu	Gly	Ser	Asp	Ser	Gly	Ile	Ser
65				70					75					80	
Glu	Asp	Leu	Pro	Ser	Asp	Pro	Gln	Asp	Thr	Pro	Pro	Arg	Ser	Gly	Pro
			85						90					95	
Ala	Thr	Ser	Pro	Ala	Gly	Cys	His	Pro	Ala	Gln	Pro	Gly	Lys	Gly	Pro
			100						105					110	
Cys	Leu	Ser	Tyr	His	Pro	Gly	Asn	Ser	Cys	Ser	Thr	Thr	Thr	Pro	Gly
		115					120							125	
Pro	Val	Ile	Gln	Gln	Gln	His	His	Leu	Gly	Ala	Ser	Tyr	Leu	Leu	Arg

130	135	140
Pro Gly Ala Gly His Cys Gln Glu Leu Val Leu Thr Glu Asp Glu Lys		
145	150	155
Lys Leu Leu Ala Lys Glu Gly Ile Thr Leu Pro Thr Gln Leu Pro Leu		160
	165	170
Thr Lys Tyr Glu Glu Arg Val Leu Lys Lys Ile Arg Arg Lys Ile Arg		175
	180	185
Asn Lys Gln Ser Ala Gln Glu Ser Arg Lys Lys Lys Lys Glu Tyr Ile		190
	195	200
Asp Gly Leu Glu Thr Arg Ser Cys Cys Cys Pro Leu Pro Ser Ser Ser		205
210	215	220
Ser Pro Pro Ser Ala Leu Leu Ala Pro Thr Lys Pro Arg Ala Leu Gly		
225	230	235
Thr Leu Arg Leu Tyr Glu Cys Ser Pro Glu Leu Cys Thr Thr Met Leu		240
	245	250
Pro Pro Ala Trp Leu Leu Met Leu Cys Gln Ala Pro Arg Pro Gln Asp		255
	260	265
Pro Asp Pro Arg Leu Thr Gln Pro Glu Lys Ser Leu Gln Glu Ala Pro		270
	275	280
Gly Gln Thr Gly Ala Ser Arg Thr Pro Arg Thr		285
290	295	

<210> 5629

<211> 428

<212> DNA

<213> Homo sapiens

<400> 5629

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aacagaagat aaagctgggg cttacagaga atgtacaact tggcccaggg cacaccagtt
120

agccatcagg ggcagngctg ctattcaggt ctgggactgt gggactccag agcccatgtt
180

ttttacgagg atgccatact gccacaatgg atggtgtctt tatctcctga tatatgattg
240

tgtgttggga ggcgtggggg ggcagctgga agaattggaga ggcataattg tggaggatct
300

tccccattc tctgctaccc tctcttggag ctcccagttc catctgagaa attatctact
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tgtatggg

428

<210> 5630

<211> 110

<212> PRT

<213> Homo sapiens

<400> 5630

Met Asp Gly Arg His Thr Gln Ser Pro Leu Thr Glu Asp Lys Ala Gly

1

5

10

15

Ala Tyr Arg Glu Cys Thr Thr Trp Pro Arg Ala His Gln Leu Ala Ile

	20		25		30										
Arg	Gly	Xaa	Ala	Ala	Ile	Gln	Val	Trp	Asp	Cys	Gly	Thr	Pro	Glu	Pro
	35						40					45			
Met	Phe	Phe	Thr	Arg	Met	Pro	Tyr	Cys	His	Asn	Gly	Trp	Cys	Leu	Tyr
	50					55					60				
Leu	Leu	Ile	Tyr	Asp	Cys	Val	Leu	Gly	Gly	Val	Gly	Trp	Gln	Leu	Glu
65					70					75				80	
Glu	Trp	Arg	Gly	Ile	Phe	Val	Glu	Asp	Leu	Pro	Pro	Phe	Ser	Ala	Thr
			85					90					95		
Leu	Ser	Trp	Ser	Ser	Gln	Phe	His	Leu	Arg	Asn	Tyr	Leu	Leu		
			100					105					110		

<210> 5631

<211> 783

<212> DNA

<213> Homo sapiens

<400> 5631

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120
ctttttatta cgagtgaaca gatgaactaa ggtaagcggg tctcagcctt ccgctgggtg
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420
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480
gccagcagca cccgagggag ggcagggggt gcacagagac cagagaaagg aaaacccac
540
agaagaaaac tcaaagcatc agtcccatgc gtgtctgctg aacgagtga tgggcccac
600
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660
ccgtctgctg ctgtgctgt gcagcccaca ccagtgcagc ccggggccct ctgagacctc
720
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780
gtc
783

<210> 5632

<211> 183

<212> PRT

<213> Homo sapiens

<400> 5632

Met Gly Val Pro Trp Ala Trp Arg Arg Gln Gln Glu Gly Val Thr Gly

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      20           25           30
Glu Leu Pro Thr Ala Lys Thr Pro Gly Glu Ala Gly Arg Gly Gly Val
      35           40           45
Arg Gly Lys Glu Gly Leu Cys Glu Ser Lys Pro His Pro Gln Ser Arg
      50           55           60
Ala Glu Thr Gln Val Cys Lys Ser His Pro Pro Pro Thr Ser Ser Ser
      65           70           75           80
Phe Glu Ala Ser Ser Thr Arg Gly Arg Ala Gly Ala Ala Gln Arg Pro
      85           90           95
Glu Lys Gly Lys Pro His Arg Arg Lys Leu Lys Ala Ser Val Pro Cys
      100          105          110
Val Ser Ala Glu Arg Val Asn Gly Pro Lys Gly Ser Ser Leu Gln Thr
      115          120          125
Ala Arg Ile His Pro Thr Gly Gly His Arg Thr Arg Pro Gly Pro Ser
      130          135          140
Ala Ser Val Pro Val Gln Pro Thr Pro Val Gln Pro Gly Ala Leu Ser
      145          150          155          160
Asp Leu Thr Thr Arg Val Pro Ser Thr Cys Val His Thr Gln Met Gln
      165          170          175
Glu Arg Thr His Thr Thr Val
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<210> 5633

<211> 2181

<212> DNA

<213> Homo sapiens

<400> 5633

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gtcaattgta tgtggtgctg tctgtcctcc tgattgcaga ggaggaagga accccttaaa
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gccctgtgtg agctgtgtct ctgaggaagc ccagggctga ggtagctacc aggcggagggc
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600
ctggtggtca tcgagggcat gggccgtgct gtccacacaa actaccacgc agccctgcgc
660
tgcgagagcc tcaagctggc cgtcatcaag aacgcgtggc tggccgagcg gctgggcggc
720

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cggtctttca ggcctatctt caagtacgag gtcccagccg agtgaggcgc tgcagctgcc
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1920
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2160
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<210> 5634

<211> 289

<212> PRT

<213> Homo sapiens

<400> 5634

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Phe Asn Phe Pro Asp Pro Tyr Ser Lys Val Lys Gln Arg Glu Asn Gly
          35           40           45
Val Ala Leu Arg Cys Phe Pro Gly Val Val Arg Ser Leu Asp Ala Leu
          50           55           60
Gly Trp Glu Glu Arg Gln Leu Ala Leu Val Lys Gly Leu Leu Ala Gly
65           70           75           80
Asn Val Phe Asp Trp Gly Ala Lys Ala Val Ser Ala Val Leu Glu Ser
          85           90           95
Asp Pro Tyr Phe Gly Phe Glu Glu Ala Lys Arg Lys Leu Gln Glu Arg
          100          105          110
Pro Trp Leu Val Asp Ser Tyr Ser Glu Trp Leu Gln Arg Leu Lys Gly
          115          120          125
Pro Pro His Lys Cys Ala Leu Ile Phe Ala Asp Asn Ser Gly Ile Asp
          130          135          140
Ile Ile Leu Gly Val Phe Pro Phe Val Arg Glu Leu Leu Leu Arg Gly
145          150          155          160
Thr Glu Val Ile Leu Ala Cys Asn Ser Gly Pro Ala Leu Asn Asp Val
          165          170          175
Thr His Ser Glu Ser Leu Ile Val Ala Glu Arg Ile Ala Gly Met Asp
          180          185          190
Pro Val Val His Ser Ala Leu Gln Glu Glu Arg Leu Leu Leu Val Gln
          195          200          205
Thr Gly Ser Ser Ser Pro Cys Leu Asp Leu Ser Arg Leu Asp Lys Gly
          210          215          220
Leu Ala Ala Leu Val Arg Glu Arg Gly Ala Asp Leu Val Val Ile Glu
225          230          235          240
Gly Met Gly Arg Ala Val His Thr Asn Tyr His Ala Ala Leu Arg Cys
          245          250          255
Glu Ser Leu Lys Leu Ala Val Ile Lys Asn Ala Trp Leu Ala Glu Arg
          260          265          270
Leu Gly Gly Arg Leu Phe Ser Val Ile Phe Lys Tyr Glu Val Pro Ala
          275          280          285
Glu

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<210> 5635

<211> 614

<212> DNA

<213> Homo sapiens

<400> 5635

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120
gcactcatca atggtgatga aaacctggcc tgccaaatat atgaaaacaa tcctcagcta
180

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aaagaatctc ttgatccaaa tacatcttat ggggagccct accagcacia tactccatta
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480
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<210> 5636

<211> 204

<212> PRT

<213> Homo sapiens

<400> 5636

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			20					25					30			
Asn	Thr	Thr	Thr	Lys	Phe	Arg	Lys	Ala	Leu	Ile	Asn	Gly	Asp	Glu	Asn	
			35				40					45				
Leu	Ala	Cys	Gln	Ile	Tyr	Glu	Asn	Asn	Pro	Gln	Leu	Lys	Glu	Ser	Leu	
	50					55				60						
Asp	Pro	Asn	Thr	Ser	Tyr	Gly	Glu	Pro	Tyr	Gln	His	Asn	Thr	Pro	Leu	
65					70				75					80		
His	Tyr	Ala	Ala	Arg	His	Gly	Met	Asn	Lys	Ile	Leu	Gly	Asp	Asp	Phe	
				85					90					95		
Arg	Arg	Ala	Asp	Cys	Leu	Gln	Met	Ile	Leu	Lys	Trp	Lys	Gly	Ala	Lys	
			100						105					110		
Leu	Asp	Gln	Gly	Glu	Tyr	Glu	Arg	Ala	Ala	Ile	Asp	Ala	Val	Asp	Asn	
		115					120					125				
Lys	Lys	Asn	Thr	Pro	Leu	His	Tyr	Ala	Ala	Ala	Ser	Gly	Met	Lys	Ala	
		130					135					140				
Cys	Val	Glu	Lys	His	Gly	Gly	Asp	Leu	Phe	Ala	Glu	Asn	Glu	Asn	Lys	
145					150				155					160		
Asp	Thr	Pro	Cys	Asp	Cys	Ala	Glu	Lys	Gln	His	His	Lys	Asp	Leu	Ala	
			165						170					175		
Leu	Asn	Leu	Glu	Ser	Gln	Met	Val	Phe	Ser	Arg	Asp	Pro	Glu	Ala	Glu	
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Glu	Ile	Glu	Ala	Glu	Tyr	Ala	Ala	Leu	Asp	Lys	Arg					
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<210> 5637

<211> 825

<212> DNA

<213> Homo sapiens

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<210> 5638
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<212> PRT
<213> Homo sapiens

<400> 5638
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35 40 45
Leu Ala Gly Arg Leu Ala Arg Ala Pro Leu Trp Leu Ala Cys Gly Asp
50 55 60
Thr Trp Ala Leu Leu His Val Pro Thr Arg Ala Val Ala Gly Ser Lys
65 70 75 80
Glu Ala Gln Pro Arg Pro Ala Cys Val Asp Pro Ala Gly Leu Arg Ala
85 90 95
Pro Glu Leu Leu Thr Val Ser Glu Pro Gly Cys Pro Ala Pro Arg Arg
100 105 110
Pro Pro Ser Ser Cys Pro Ala Trp Asp Pro Ser Ala Val Cys Leu Leu
115 120 125
Asn Gln Gly Val

130

<210> 5639
<211> 2433
<212> DNA
<213> Homo sapiens

<400> 5639
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120
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4818

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<210> 5640

<211> 540

<212> PRT

<213> Homo sapiens

<400> 5640

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 20 25 30
 Ala Ser Ala Pro Gln Glu Lys Leu Ser Ser Glu Val Glu Asp Pro Pro
 35 40 45
 Pro Tyr Leu Met Met Asp Glu Leu Leu Gly Arg Gln Arg Lys Val Tyr
 50 55 60
 Leu Glu Thr Tyr Gly Cys Gln Met Asn Val Asn Asp Thr Glu Ile Ala
 65 70 75 80
 Trp Ser Ile Leu Gln Lys Ser Gly Tyr Leu Arg Pro Val Thr Ser Lys

85 90 95
Ala Asp Val Ile Leu Leu Val Thr Cys Ser Ile Arg Glu Lys Ala Glu
100 105 110
Gln Thr Ile Trp Asn Arg Leu His Gln Leu Lys Ala Leu Lys Thr Arg
115 120 125
Arg Pro Arg Ser Arg Val Pro Leu Arg Ile Gly Ile Leu Gly Cys Met
130 135 140
Ala Glu Arg Leu Lys Glu Glu Ile Leu Asn Arg Glu Lys Met Val Asp
145 150 155 160
Ile Leu Ala Gly Pro Asp Ala Tyr Arg Asp Leu Pro Arg Leu Leu Ala
165 170 175
Val Ala Glu Ser Gly Gln Gln Ala Ala Asn Val Leu Leu Ser Leu Asp
180 185 190
Glu Thr Tyr Ala Asp Val Met Pro Val Gln Thr Ser Ala Ser Ala Thr
195 200 205
Ser Ala Phe Val Ser Ile Met Arg Gly Cys Asp Asn Met Cys Ser Tyr
210 215 220
Cys Ile Val Pro Phe Thr Arg Gly Arg Glu Arg Ser Arg Pro Ile Ala
225 230 235 240
Ser Ile Leu Glu Glu Val Lys Lys Leu Ser Glu Gln Gly Leu Lys Glu
245 250 255
Val Thr Leu Leu Gly Gln Asn Val Asn Ser Phe Arg Asp Asn Ser Glu
260 265 270
Val Gln Phe Asn Ser Ala Val Pro Thr Asn Leu Ser Arg Gly Phe Thr
275 280 285
Thr Asn Tyr Lys Thr Lys Gln Gly Gly Leu Arg Phe Ala His Leu Leu
290 295 300
Asp Gln Val Ser Arg Val Asp Pro Glu Met Arg Ile Arg Phe Thr Ser
305 310 315 320
Pro His Pro Lys Asp Phe Pro Asp Glu Val Leu Gln Leu Ile His Glu
325 330 335
Arg Asp Asn Ile Cys Lys Gln Ile His Leu Pro Ala Gln Ser Gly Ser
340 345 350
Ser Arg Val Leu Glu Ala Met Arg Arg Gly Tyr Ser Arg Glu Ala Tyr
355 360 365
Val Glu Leu Val His His Ile Arg Glu Ser Ile Pro Gly Val Ser Leu
370 375 380
Ser Ser Asp Phe Ile Ala Gly Phe Cys Gly Glu Thr Glu Glu Asp His
385 390 395 400
Val Gln Thr Val Ser Leu Leu Arg Glu Val Gln Tyr Asn Met Gly Phe
405 410 415
Leu Phe Ala Tyr Ser Met Arg Gln Lys Thr Arg Ala Tyr His Arg Leu
420 425 430
Lys Asp Asp Val Pro Glu Glu Val Lys Leu Arg Arg Leu Glu Glu Leu
435 440 445
Ile Thr Ile Phe Arg Glu Glu Ala Thr Lys Ala Asn Gln Thr Ser Val
450 455 460
Gly Cys Thr Gln Leu Val Leu Val Glu Gly Leu Ser Lys Arg Ser Ala
465 470 475 480
Thr Asp Leu Cys Gly Arg Asn Asp Gly Asn Leu Lys Val Ile Phe Pro
485 490 495
Asp Ala Glu Met Glu Asp Val Asn Asn Pro Gly Leu Arg Val Arg Ala
500 505 510
Gln Pro Gly Asp Tyr Val Leu Val Lys Ile Thr Xaa Gln Pro Val Leu

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Arg	His	Leu	Gly	Asp	Met
		Phe	Ser	Ala	Gly
			Pro	Leu	
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<210> 5641
 <211> 293
 <212> DNA
 <213> Homo sapiens

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 180
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 293

<210> 5642
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 5642
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 Lys Val Val Thr Phe Cys Gly His Ala Ser Lys Thr Asn Gln Val Asn
 20 25 30
 Ser Gly Gly Val Leu Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu
 35 40 45
 Ala Gly Ala Pro Leu Ala Ser Leu Glu Ser Gln Val Arg Arg Ala Asp
 50 55 60
 Thr Ser Arg Asn Ser Ser Gln Cys Ser Arg Ser Leu Gly Arg Pro Thr
 65 70 75 80
 Ser Pro Leu His Pro Thr Ala
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<210> 5643
 <211> 1218
 <212> DNA
 <213> Homo sapiens

<400> 5643
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 caaaataaca tggcagccag acgaattaca caggagactt ttgatgctgt attacaagaa
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 aaagccaaac gatatcacat ggatgccagt ggtgaggctg taagcgaaac tcttcagttt
 180
 aaagctcaag atctcttaag ggcagtccca agatccagag cagagatgta tgatgacgtc
 240

cacagcgatg gcagatactc cctcagtggg tctgtagctc actctagaga tgccggaaga
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 360
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 480
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 660
 gaggtgact ctgtgcttag gggcagcagt caagtccagg ccagaggctg agctctaaac
 720
 atcgttgacc aggaagggtc cctcctagga aagggggaga ctcagggcct gctcacagct
 780
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 840
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 960
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 1020
 atcatagata agtctgatgt tttttcaaga tttgggatag aaataatcaa atgggcagga
 1080
 ttccacacca taaaattaga ttattaaatt tttcccaaac ttttccagac tctctttgaa
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 1218

<210> 5644

<211> 202

<212> PRT

<213> Homo sapiens

<400> 5644

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Ser	Arg	Leu	Ile	Glu	Lys	Glu	Cys	Leu	Glu	Lys	Glu	Ser	Arg	Asp	Tyr
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Asp	Val	Asp	His	Pro	Gly	Glu	Ala	Asp	Ser	Val	Leu	Arg	Gly	Ser	Ser
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Gln	Val	Gln	Ala	Arg	Gly	Arg	Ala	Leu	Asn	Ile	Val	Asp	Gln	Glu	Gly
65					70				75					80	
Ser	Leu	Leu	Gly	Lys	Gly	Glu	Thr	Gln	Gly	Leu	Leu	Thr	Ala	Lys	Gly
			85					90						95	
Gly	Val	Gly	Lys	Leu	Val	Thr	Leu	Arg	Asn	Val	Ser	Thr	Lys	Lys	Ile

	100		105		110										
Pro	Thr	Val	Asn	Arg	Ile	Thr	Pro	Lys	Thr	Gln	Gly	Thr	Asn	Gln	Ile
	115						120					125			
Gln	Lys	Asn	Thr	Pro	Ser	Pro	Asp	Val	Thr	Leu	Gly	Thr	Asn	Pro	Gly
	130						135					140			
Thr	Glu	Asp	Ile	Gln	Phe	Pro	Ile	Gln	Lys	Ile	Pro	Leu	Gly	Leu	Asp
145					150					155					160
Leu	Lys	Asn	Leu	Arg	Leu	Pro	Arg	Arg	Lys	Met	Ser	Phe	Asp	Ile	Ile
			165						170					175	
Asp	Lys	Ser	Asp	Val	Phe	Ser	Arg	Phe	Gly	Ile	Glu	Ile	Ile	Lys	Trp
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Ala	Gly	Phe	His	Thr	Ile	Lys	Leu	Asp	Tyr						
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<211> 156
<212> DNA
<213> Homo sapiens

<400> 5645
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156

<210> 5646
<211> 52
<212> PRT
<213> Homo sapiens

<400> 5646
Pro Arg Pro Ser Arg Arg Arg Asn Cys Arg Trp Ala Val Phe Gly Leu
1 5 10 15
Ala Gln Arg Cys Pro Gln Ile Ser Phe Pro Ser Pro Arg Gln Glu Asp
20 25 30
Thr Ser Thr Gly Lys Phe Thr Cys Lys Val Pro Gly Leu Tyr Tyr Phe
35 40 45
Val Tyr His Ala
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<210> 5647
<211> 150
<212> DNA
<213> Homo sapiens

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<210> 5648
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 5648
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 Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu Pro Gly
 35 40 45
 His Pro
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<210> 5649
 <211> 345
 <212> DNA
 <213> Homo sapiens

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 gacccgagtc tccggcgag cgcggggcgc ttgctccgct cgcagggtcat ccacagcggc
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 240
 ccgtggggcc ctccgacttc gggccgcgca gtatcgaccc cacactcaca cgcctcttcg
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 345

<210> 5650
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 5650
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 Gln Thr Arg Thr Arg Thr Gln Thr Arg Arg Thr Arg Val Ser Gly Ala
 20 25 30
 Ala Arg Ala Ala Cys Ser Ala Arg Arg Ser Ser Thr Ala Val Thr Ser
 35 40 45
 Trp Cys Arg Arg Arg Thr Ala Thr Arg Cys Pro Gly Gly Ala Thr Arg
 50 55 60
 Arg Val Arg Gly Ala Leu Arg Leu Arg Ala Ala Gln Tyr Arg Pro His
 65 70 75 80
 Thr His Thr Pro Leu Arg Val Leu Glu Pro Gly Leu Gln Trp Gln Ala
 85 90 95
 Gly Val Ser Gln

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<210> 5651
<211> 615
<212> DNA
<213> Homo sapiens

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gctagcttgc taggaatgag agtaaacaat gtttatgatg tggataataa gacatacctt
240
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300
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360
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420
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480
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615

<210> 5652
<211> 163
<212> PRT
<213> Homo sapiens

<400> 5652
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1 5 10 15
Leu Asn Ala Ser Leu Leu Gly Met Arg Val Asn Asn Val Tyr Asp Val
20 25 30
Asp Asn Lys Thr Tyr Leu Ile Arg Leu Gln Lys Pro Asp Phe Lys Ala
35 40 45
Thr Leu Leu Leu Glu Ser Gly Ile Gln Ile His Thr Thr Glu Phe Glu
50 55 60
Trp Pro Lys Asn Met Met Pro Ser Ser Phe Ala Met Lys Cys Arg Lys
65 70 75 80
His Leu Lys Ser Arg Arg Leu Val Ser Ala Lys Gln Leu Gly Val Asp
85 90 95
Arg Ile Val Asp Phe Gln Phe Gly Ser Asp Glu Ala Ala Tyr His Leu
100 105 110
Ile Ile Glu Leu Tyr Asp Arg Gly Asn Ile Val Leu Thr Asp Tyr Glu
115 120 125
Tyr Val Ile Leu Asn Ile Leu Arg Phe Arg Thr Asp Glu Ala Asp Asp

4825

130 135 140
Val Lys Phe Ala Val Arg Glu Arg Tyr Pro Leu Asp His Ala Arg Ala
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Ala Glu Pro

<210> 5653
<211> 1439
<212> DNA
<213> Homo sapiens

<400> 5653
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1260

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cacttaacca atgccttctg gtactgccat tctttttttt ttttttcaag tattggaagg
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1439

<210> 5654
<211> 245
<212> PRT
<213> Homo sapiens

<400> 5654
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Tyr Gly Ile Pro Gly Met Pro Gly Leu Pro Gly Ala Pro Gly Lys Asp
35 40 45
Gly Tyr Asp Gly Leu Pro Gly Pro Lys Gly Glu Pro Gly Ile Pro Ala
50 55 60
Ile Pro Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu
65 70 75 80
Pro Gly His Pro Gly Lys Asn Gly Pro Met Gly Pro Pro Gly Met Pro
85 90 95
Gly Val Pro Gly Pro Met Gly Ile Pro Gly Glu Pro Gly Glu Glu Gly
100 105 110
Arg Tyr Lys Gln Lys Phe Gln Ser Val Phe Thr Val Thr Arg Gln Thr
115 120 125
His Gln Pro Pro Ala Pro Asn Ser Leu Ile Arg Phe Asn Ala Val Leu
130 135 140
Thr Asn Pro Gln Gly Asp Tyr Asp Thr Ser Thr Gly Lys Phe Thr Cys
145 150 155 160
Lys Val Pro Gly Leu Tyr Tyr Phe Val Tyr His Ala Ser His Thr Ala
165 170 175
Asn Leu Cys Val Leu Leu Tyr Arg Ser Gly Val Lys Val Val Thr Phe
180 185 190
Cys Gly His Thr Ser Lys Thr Asn Gln Val Asn Ser Gly Gly Val Leu
195 200 205
Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu Ala Val Asn Asp Tyr
210 215 220
Tyr Asp Met Val Gly Ile Gln Gly Ser Asp Ser Val Phe Ser Gly Phe
225 230 235 240
Leu Leu Phe Pro Asp
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<210> 5655
<211> 3810
<212> DNA
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<400> 5655
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3300

gaggagccgc cagtgcctga agccccagc tcggggcccc cctcctcctc cctggaattg
3360
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3420
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3480
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3600
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3660
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3780
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3810

<210> 5656

<211> 987

<212> PRT

<213> Homo sapiens

<400> 5656

Asp	Leu	Leu	Glu	Glu	Asp	Glu	Leu	Leu	Glu	Gln	Lys	Phe	Gln	Glu	Ala
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Val	Gly	Gln	Ala	Gly	Xaa	Pro	Ser	Pro	Ser	Xaa	Ser	Lys	Ala	Glu	Leu
			20					25					30		
Ala	Glu	Val	Arg	Arg	Glu	Trp	Ala	Lys	Tyr	Met	Glu	Val	His	Glu	Lys
			35				40					45			
Ala	Ser	Phe	Thr	Asn	Ser	Glu	Leu	His	Arg	Ala	Met	Asn	Leu	His	Val
			50			55					60				
Gly	Asn	Leu	Arg	Leu	Leu	Ser	Gly	Pro	Leu	Asp	Gln	Val	Arg	Ala	Ala
65					70				75					80	
Leu	Pro	Thr	Pro	Ala	Leu	Ser	Pro	Glu	Asp	Lys	Ala	Val	Leu	Gln	Asn
			85					90					95		
Leu	Lys	Arg	Ile	Leu	Ala	Lys	Val	Gln	Glu	Met	Arg	Asp	Gln	Arg	Val
			100					105					110		
Ser	Leu	Glu	Gln	Gln	Leu	Arg	Glu	Leu	Ile	Gln	Lys	Asp	Asp	Ile	Thr
			115				120					125			
Ala	Ser	Leu	Val	Thr	Thr	Asp	His	Ser	Glu	Met	Lys	Lys	Leu	Phe	Glu
			130			135					140				
Glu	Gln	Leu	Lys	Lys	Tyr	Asp	Gln	Leu	Lys	Val	Tyr	Leu	Glu	Gln	Asn
145					150				155					160	
Leu	Ala	Ala	Gln	Asp	Arg	Val	Leu	Cys	Ala	Leu	Thr	Glu	Ala	Asn	Val
			165					170					175		
Gln	Tyr	Ala	Ala	Val	Arg	Arg	Val	Leu	Ser	Asp	Leu	Asp	Gln	Lys	Trp
			180				185					190			
Asn	Ser	Thr	Leu	Gln	Thr	Leu	Val	Ala	Ser	Tyr	Glu	Ala	Tyr	Glu	Asp
			195				200					205			
Leu	Met	Lys	Lys	Ser	Gln	Glu	Gly	Arg	Asp	Phe	Tyr	Ala	Asp	Leu	Glu
	210				215					220					
Ser	Lys	Val	Ala	Ala	Leu	Leu	Glu	Arg	Thr	Gln	Ser	Thr	Cys	Gln	Ala

225 230 235 240
Arg Glu Ala Ala Arg Gln Gln Leu Leu Asp Arg Glu Leu Lys Lys Lys
 245 250 255
Pro Pro Pro Arg Pro Thr Ala Pro Lys Pro Leu Leu Pro Arg Arg Glu
 260 265 270
Glu Ser Glu Ala Val Glu Ala Gly Asp Pro Pro Glu Glu Leu Arg Ser
 275 280 285
Leu Pro Pro Asp Met Val Ala Gly Pro Arg Leu Pro Asp Thr Phe Leu
 290 295 300
Gly Ser Ala Thr Pro Leu His Phe Pro Pro Ser Pro Phe Pro Ser Ser
305 310 315 320
Thr Gly Pro Gly Pro His Tyr Leu Ser Gly Pro Leu Pro Pro Gly Thr
 325 330 335
Tyr Ser Gly Pro Thr Gln Leu Ile Gln Pro Arg Ala Pro Gly Pro His
 340 345 350
Ala Met Pro Val Ala Pro Gly Pro Ala Leu Tyr Pro Ala Pro Ala Tyr
 355 360 365
Thr Pro Glu Leu Gly Leu Val Pro Arg Ser Ser Pro Gln His Gly Val
 370 375 380
Val Ser Ser Pro Tyr Val Gly Val Gly Pro Ala Pro Pro Val Ala Gly
385 390 395 400
Leu Pro Ser Ala Pro Pro Pro Gln Phe Ser Gly Pro Glu Leu Ala Met
 405 410 415
Ala Val Arg Pro Ala Thr Thr Thr Val Asp Ser Ile Gln Ala Pro Ile
 420 425 430
Pro Ser His Thr Ala Pro Arg Pro Asn Pro Thr Pro Ala Pro Pro Pro
 435 440 445
Pro Cys Phe Pro Val Pro Pro Pro Gln Pro Leu Pro Thr Pro Tyr Thr
 450 455 460
Tyr Pro Ala Gly Ala Lys Gln Pro Ile Pro Ala Gln His His Phe Ser
465 470 475 480
Ser Gly Ile Pro Thr Gly Phe Pro Ala Pro Arg Ile Gly Pro Gln Pro
 485 490 495
Gln Pro His Pro Gln Pro His Pro Ser Gln Ala Phe Gly Pro Gln Pro
 500 505 510
Pro Gln Gln Pro Leu Pro Leu Gln His Pro His Leu Phe Pro Pro Gln
 515 520 525
Ala Pro Gly Leu Leu Pro Pro Gln Ser Pro Tyr Pro Tyr Ala Pro Gln
 530 535 540
Pro Gly Val Leu Gly Gln Pro Pro Pro Pro Leu His Thr Gln Leu Tyr
545 550 555 560
Pro Gly Pro Ala Gln Asp Pro Leu Pro Ala His Ser Gly Ala Leu Pro
 565 570 575
Phe Pro Ser Pro Gly Pro Pro Gln Pro Pro His Pro Pro Leu Ala Tyr
 580 585 590
Gly Pro Ala Pro Ser Thr Arg Pro Met Gly Pro Gln Ala Ala Pro Leu
 595 600 605
Thr Ile Arg Gly Pro Ser Ser Ala Gly Gln Ser Thr Pro Ser Pro His
 610 615 620
Leu Val Pro Ser Pro Ala Pro Ser Pro Gly Pro Gly Pro Val Pro Pro
625 630 635 640
Arg Pro Pro Ala Ala Glu Pro Pro Pro Cys Leu Arg Arg Gly Ala Ala
 645 650 655
Ala Ala Asp Leu Leu Ser Ser Ser Pro Glu Ser Gln His Gly Gly Thr

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<210> 5657
<211> 1020
<212> DNA
<213> Homo sapiens
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<400> 5657
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180
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tgctgttgtc tctccctgca gccttgccac gatcctgttg tcaccccaga tggctacctg
240
tatgagcgtg aggccatcct ggagtacatt ctgcaccaga agaaggagat tgcccggcag
300
atgaaggcct acgagaagca gcgggggcacc cggcgcgagg agcagaagga gcttcagcgg
360
gcggcctcgc aggaccatgt gcggggcctc ctggagaagg agtcggctat cgtgagccgg
420
cccctcaacc ctttcacagc caaggccctc tcgggcacca gccagatga tgtccaacct
480
gggcccagtg tgggtcctcc aagtaaggac aaggacaaag tgctgccag cttctggatc
540
ccgtcgctga cggccgaagc caaggccacc aagctggaga agccgtccc caggtgacc
600
tgcccatgt caggaagcc cctgcgcgtg tcggacctga cggcgtgca cttcacaccg
660
ctagacagct ccgtggaccg cgtggggctc atcacccgca gcgagcgcta cgtgtgtgcc
720
gtgaccgcg acagcctgag caacgccacc ccctgcgctg tgctggggcc ctctggggct
780
gtggtcaccc tcgaatgctg ggagaagctg attcggaagg acatggtgga ccctgtgact
840
ggagacaaac tcacagaccg cgacatcatc gtgctgcagc ggggcggtac cggcttcgcg
900
ggctccggag tgaagctgca agcggagaaa tcacggccgg tgatgcaggc ctgagtgtgt
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1020

<210> 5658
<211> 301
<212> PRT
<213> Homo sapiens

<400> 5658
Met Thr Arg His Gly Lys Asn Cys Thr Ala Gly Ala Val Tyr Thr Tyr
1 5 10 15
His Glu Lys Lys Lys Asp Thr Ala Ala Ser Gly Tyr Gly Thr Gln Asn
20 25 30
Ile Arg Leu Ser Arg Asp Ala Val Lys Asp Phe Asp Cys Cys Cys Leu
35 40 45
Ser Leu Gln Pro Cys His Asp Pro Val Val Thr Pro Asp Gly Tyr Leu
50 55 60
Tyr Glu Arg Glu Ala Ile Leu Glu Tyr Ile Leu His Gln Lys Lys Glu
65 70 75 80
Ile Ala Arg Gln Met Lys Ala Tyr Glu Lys Gln Arg Gly Thr Arg Arg
85 90 95
Glu Glu Gln Lys Glu Leu Gln Arg Ala Ala Ser Gln Asp His Val Arg
100 105 110
Gly Phe Leu Glu Lys Glu Ser Ala Ile Val Ser Arg Pro Leu Asn Pro
115 120 125
Phe Thr Ala Lys Ala Leu Ser Gly Thr Ser Pro Asp Asp Val Gln Pro
130 135 140
Gly Pro Ser Val Gly Pro Pro Ser Lys Asp Lys Asp Lys Val Leu Pro

145 150 155 160
Ser Phe Trp Ile Pro Ser Leu Thr Pro Glu Ala Lys Ala Thr Lys Leu
 165 170 175
Glu Lys Pro Ser Arg Thr Val Thr Cys Pro Met Ser Gly Lys Pro Leu
 180 185 190
Arg Met Ser Asp Leu Thr Pro Val His Phe Thr Pro Leu Asp Ser Ser
 195 200 205
Val Asp Arg Val Gly Leu Ile Thr Arg Ser Glu Arg Tyr Val Cys Ala
 210 215 220
Val Thr Arg Asp Ser Leu Ser Asn Ala Thr Pro Cys Ala Val Leu Arg
225 230 235 240
Pro Ser Gly Ala Val Val Thr Leu Glu Cys Val Glu Lys Leu Ile Arg
 245 250 255
Lys Asp Met Val Asp Pro Val Thr Gly Asp Lys Leu Thr Asp Arg Asp
 260 265 270
Ile Ile Val Leu Gln Arg Gly Gly Thr Gly Phe Ala Gly Ser Gly Val
 275 280 285
Lys Leu Gln Ala Glu Lys Ser Arg Pro Val Met Gln Ala
 290 295 300

<210> 5659

<211> 1263

<212> DNA

<213> Homo sapiens

<400> 5659

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120
tcagagaagg cttagatcta tgcattgggt gttatttctca gatgcagaga tgtaaagcc
180
atctttctct tctgttttca ggtcacatgt gccaatttaa cgaacggtgg aaagtcagaa
240
cttctgaaat caggaagcag caaatccaca ctaaagcaca tatggacaga aagcagcaaa
300
gacttgctta tcagccgact cctgtcacag acttttctgt gcaaagagaa tgatacagat
360
ttggacctga gatatgacac ccagaaacct tattctgagc aagacctctg ggactggctg
420
aggaactcca cagaccttca agagcctcgg ccagggcca agagaaggcc cattgttaaa
480
acgggcaagt ttaagaaaat gtttggatgg ggcgattttc attccaacat caaaacagt
540
aagctgaacc tgttgataac tgggaaaatt gtagatcatg gcaatgggac atttagtggt
600
tatttcaggc ataattcaac tgggtcaagg aatgtatctg tcagcttggt acccctaca
660
aaaatcgtgg aatttgactt ggcacaacaa accgtgattg atgccaaaga ttccaagtct
720
tttaattgtc gcattgaata tgaaaagggt gacaaggcta ccaagaacac actctgcaac
780
tatgaccctt caaaaacctg ttaccaggag caaacccaaa gtcatgtatc ctggctctgc
840

tccaagccct ttaaggatgat ctgtattttac atttcctttt atagtacaga ttataaactg
 900
 gtacagaaag tgtgccctga ctacaactac cacagtgaca caccttactt tccctcggga
 960
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 1020
 gttacctcaa agaagaaggc cacatctgtt gcctggaatg tgtctacact gctgctcttg
 1080
 tcaactggct gcaaaatata ctagtggaac acactctgat gtaatttctg cccagtcagc
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 ttcacccctc agtataattg taaatcatca cagattttga attcacacct gaagacatgc
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 1260
 att
 1263

<210> 5660
 <211> 253
 <212> PRT
 <213> Homo sapiens

<400> 5660
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 20 25 30
 Lys Asp Leu Ser Ile Ser Arg Leu Leu Ser Gln Thr Phe Arg Gly Lys
 35 40 45
 Glu Asn Asp Thr Asp Leu Asp Leu Arg Tyr Asp Thr Pro Glu Pro Tyr
 50 55 60
 Ser Glu Gln Asp Leu Trp Asp Trp Leu Arg Asn Ser Thr Asp Leu Gln
 65 70 75 80
 Glu Pro Arg Pro Arg Ala Lys Arg Arg Pro Ile Val Lys Thr Gly Lys
 85 90 95
 Phe Lys Lys Met Phe Gly Trp Gly Asp Phe His Ser Asn Ile Lys Thr
 100 105 110
 Val Lys Leu Asn Leu Leu Ile Thr Gly Lys Ile Val Asp His Gly Asn
 115 120 125
 Gly Thr Phe Ser Val Tyr Phe Arg His Asn Ser Thr Gly Gln Gly Asn
 130 135 140
 Val Ser Val Ser Leu Val Pro Pro Thr Lys Ile Val Glu Phe Asp Leu
 145 150 155 160
 Ala Gln Gln Thr Val Ile Asp Ala Lys Asp Ser Lys Ser Phe Asn Cys
 165 170 175
 Arg Ile Glu Tyr Glu Lys Val Asp Lys Ala Thr Lys Asn Thr Leu Cys
 180 185 190
 Asn Tyr Asp Pro Ser Lys Thr Cys Tyr Gln Glu Gln Thr Gln Ser His
 195 200 205
 Val Ser Trp Leu Cys Ser Lys Pro Phe Lys Val Ile Cys Ile Tyr Ile
 210 215 220
 Ser Phe Tyr Ser Thr Asp Tyr Lys Leu Val Gln Lys Val Cys Pro Asp
 225 230 235 240
 Tyr Asn Tyr His Ser Asp Thr Pro Tyr Phe Pro Ser Gly

245

250

<210> 5661
<211> 578
<212> DNA
<213> Homo sapiens

<400> 5661
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120
ataacccagt gcacggcaag gacccagcag gaagcaccag ccactggccc cgacctcccg
180
caccaggac ctgacgggca cttagacaca cacagtggcc tgagctccaa ctccagcatg
240
accacgcggg agcttcagca gtactggcag aaccagaaat gccgctggaa gcacgtcaaa
300
ctgctctttg agatcgcttc agctcgcatc gaggagagaa aagtctctaa gtttgtgatg
360
gggaaatcaa ggcctggaga gatgacttat ccagggtcac gtggcgagac agggacagca
420
ccagaaccag acccgagatg tccacgtcaa agtgacatgc tctgagaggc agcacacaca
480
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540
tgcagggtca gtgctgaggc ctgggcaggg ccgctagc
578

<210> 5662
<211> 148
<212> PRT
<213> Homo sapiens

<400> 5662
Met Thr Leu Leu Pro Asp Pro Trp Thr His Thr Ala Leu Gly Thr Gly
1 5 10 15
Cys Leu Gly Ala Cys Lys Ser Arg Ala Pro Trp Glu Pro Trp Cys Met
20 25 30
Gly Pro Ile Thr Gln Cys Thr Ala Arg Thr Gln Gln Glu Ala Pro Ala
35 40 45
Thr Gly Pro Asp Leu Pro His Pro Gly Pro Asp Gly His Leu Asp Thr
50 55 60
His Ser Gly Leu Ser Ser Asn Ser Ser Met Thr Thr Arg Glu Leu Gln
65 70 75 80
Gln Tyr Trp Gln Asn Gln Lys Cys Arg Trp Lys His Val Lys Leu Leu
85 90 95
Phe Glu Ile Ala Ser Ala Arg Ile Glu Glu Arg Lys Val Ser Lys Phe
100 105 110
Val Met Gly Lys Ser Arg Pro Gly Glu Met Thr Tyr Pro Gly Ser Arg
115 120 125
Gly Glu Thr Gly Thr Ala Pro Glu Pro Asp Pro Arg Cys Pro Arg Gln
130 135 140
Ser Asp Met Leu

145

<210> 5663
<211> 857
<212> DNA
<213> Homo sapiens

<400> 5663
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120
agacaggagg ctgccgtggt caagaagggc caagccttga agtctcacgg caccctctgt
180
ggcggaggta taaggctcag gggccaacta ctgggtcttg cagtcccat cggtgctgtg
240
ggctgtcttc accttcttta gttccttctg tagctcagac tcggccacca caacctcctt
300
tggcttctgg taagagatga tcagggtgca gttggcgtgg gcaaagctca gcaaggcgtc
360
atccagaggt agctggtgtc tatctagatc aggaatggag aacttcttgt agtacttctt
420
gttgggttgt ctgacaatga tgcagcgtc cttctggtcc acagagacac tatagacatc
480
cttaggatag gggagggttc gaatccgcc ctggaaactc atcttggtgt ccttgcgcat
540
gaagatagga ttggcattgc tttccttgat gagttcaggc cccagggtcc ctgctcctag
600
gggcgctggg tctcctactt caagctgcc ctggcccatg gctcccaggg cacttttcac
660
acgccacttt ctcaacaagta gttcactcgt cttctcgtca tattcttcag ccatttcctt
720
gccgtctggg aataaatagt gaaccttcct tctcccgctc tgcagcagcg cagtcttctg
780
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840
gccagccgc tgccatg
857

<210> 5664
<211> 203
<212> PRT
<213> Homo sapiens

<400> 5664
Met Ala Val Thr Gly Trp Leu Glu Ser Leu Arg Thr Ala Gln Lys Thr
1 5 10 15
Ala Leu Leu Gln Asp Gly Arg Arg Lys Val His Tyr Leu Phe Pro Asp
20 25 30
Gly Lys Glu Met Ala Glu Glu Tyr Asp Glu Lys Thr Ser Glu Leu Leu
35 40 45
Val Arg Lys Trp Arg Val Lys Ser Ala Leu Gly Ala Met Gly Gln Trp
50 55 60
Gln Leu Glu Val Gly Asp Pro Ala Pro Leu Gly Ala Gly Asn Leu Gly

4837

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65          70          75          80
Pro Glu Leu Ile Lys Glu Ser Asn Ala Asn Pro Ile Phe Met Arg Lys
          85          90          95
Asp Thr Lys Met Ser Phe Gln Trp Arg Ile Arg Asn Leu Pro Tyr Pro
          100          105          110
Lys Asp Val Tyr Ser Val Ser Val Asp Gln Lys Glu Arg Cys Ile Ile
          115          120          125
Val Arg Thr Thr Asn Lys Lys Tyr Tyr Lys Lys Phe Ser Ile Pro Asp
          130          135          140
Leu Asp Arg His Gln Leu Pro Leu Asp Asp Ala Leu Leu Ser Phe Ala
          145          150          155          160
His Ala Asn Cys Thr Leu Ile Ile Ser Tyr Gln Lys Pro Lys Glu Val
          165          170          175
Val Val Ala Glu Ser Glu Leu Gln Lys Glu Leu Lys Lys Val Lys Thr
          180          185          190
Ala His Ser Asn Asp Gly Asp Cys Lys Thr Gln
          195          200

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<210> 5665
 <211> 531
 <212> DNA
 <213> Homo sapiens

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<400> 5665
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120
cagcggccct ctgaagtcac ttgcttcacg gaggtgttac tgtctgctgc tggacagagc
180
atgatggggg ctgcaagggc tccctcaaac cctggactcc tccaacagag ggctcctggg
240
tgccaggctc agctctgccc tgcgtcggcc ccagggcgta gggaggggtgt ttaatcctgg
300
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360
ctgtaccggg agcgcttgcg gcagcgatgc gagcggcgcc cgggtggagca ggtgctgtac
420
cacggcacga cggcaccggc agtgctgac atctgcgccc acggcttcaa ccgcagcttc
480
tgcgcccgca acgccacggt ctacgggaag ggcgtgtatt tcgccaggcg c
531

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<210> 5666
 <211> 79
 <212> PRT
 <213> Homo sapiens

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<400> 5666
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20     25     30
Glu Arg Arg Pro Val Glu Gln Val Leu Tyr His Gly Thr Thr Ala Pro

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35 40 45
 Ala Val Pro Asp Ile Cys Ala His Gly Phe Asn Arg Ser Phe Cys Gly
 50 55 60
 Arg Asn Ala Thr Val Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg
 65 70 75

<210> 5667
 <211> 858
 <212> DNA
 <213> Homo sapiens

<400> 5667
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 120
 tttgagaagt taagaatgat ttccaaggaa atccgccaaag ttgttcgaat gacttctgct
 180
 aacatggacc cagctatgat gtttcgacag aggtcactga gtcaaggaag cacaaattca
 240
 aacatgctgg atgttcaggg aggtgctcac aaaaaaaggg cacgccgcag ctctctgctt
 300
 aatgccaaaga agctatatga ggatgcccac atggcaagga aggtgaagca gtatctttcc
 360
 agtctcgatg tagagacaga tgaggagaag ttccagatga tgtcattaca gntggagcct
 420
 gcatatggta cctgtgagta caagttttca tttatgtgac gctaaagagc acaacaaaat
 480
 aaaaacttat ttctctagaa ttatacctaa gtcccaagaa aattaacttt cactcacaaa
 540
 agattgctgg cataccttaa gcatcatgtg atccaattaa tcacagactg aatcccatcc
 600
 attcctgatg gctacactat ccaaaaaata gagggataag tagatcttta aaaagctttt
 660
 taattctttt aaaaactgga tcattataga ggaggctttc tgtttgagaa cattttttata
 720
 ttcaccccta aagagtaaac ataagtggaa tttttacctc tttttatttc atggataata
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 tttaccaact agaaaatata agaaatttga ttaaaacacc agtgataata ggtagcttac
 840
 aggtgccagt agtaaggc
 858

<210> 5668
 <211> 152
 <212> PRT
 <213> Homo sapiens

<400> 5668
 Xaa Ser Ala Arg Gly Ser Gln Ser Met Gln Pro Pro Ile Ile Pro Leu
 1 5 10 15
 Phe Pro Val Val Lys Lys Asp Met Thr Phe Leu His Glu Gly Asn Asp
 20 25 30
 Ser Lys Val Asp Gly Leu Val Asn Phe Glu Lys Leu Arg Met Ile Ser

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<210> 5669
<211> 1842
<212> DNA
<213> Homo sapiens
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<400> 5669					
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120					
gccatgatgc	gcagctccat	agagaggggc	aatgggtct	tcttccagaa	ctgccacctg
180					
gcaccaagct	ggatgccagc	cctagaacgc	ctcatcgagc	acatcaaccc	cgacaaggta
240					
cacagggact	tccgcctctg	gctcaccagc	ctgcccagca	acaagttccc	agtgtccatc
300					
ctgcagaacg	gctccaagat	gaccattgag	cggccacgcg	gtgtcagggc	caacctgctg
360					
aagtcctata	gtagccttgg	tgaagacttc	ctcaactcct	gccacaaggt	gatggagttc
420					
aagtctctgc	tgctgtctct	gtgcttgttc	catgggaacg	ccctggagcg	ccgtaagttt
480					
gggcccctgg	gcttcaacat	cccctatgag	ttcacggatg	gagatctgcg	catctgcatc
540					
agccagctca	agatgtttct	ggacgaatat	gatgacatcc	cctacaaggt	cctcaagtac
600					
acggcagggg	agatcaatta	cggggggccgt	gtcactgatg	actgggaccg	gcgctgcatc
660					
atgaacatct	tggaggactt	ctacaaccct	gacgtgctct	cccctgagca	cagctacagc
720					
gcctcgggca	tctaccacca	gatcccgctt	acctacgacc	tccacggcta	cctctcctac
780					
atcaagagcc	tcccactcaa	tgatatgcct	gagatctttg	gcctgcatga	caatgccaac
840					
atcacctttg	cccagaacga	gacgttcgcc	ctcctgggca	ccatcatcca	gctgcaaccc
900					
aatcatctt	ctgcaggcag	ccagggccgg	gaggagatag	tggaggacgt	cacccaaaac
960					

attctgctca aggtgcctga gcctatcaac ttgcaatggg tgatggccaa gtaccagtg
 1020
 ctgtatgagg aatcaatgaa cacagtacta gtacaagagg tcattaggta caatcggctg
 1080
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 1140
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 1200
 tggagtgcc aaggcctacc atcgtctcaag cctctgtcat catgggtcat ggacctgctg
 1260
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 1320
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 1380
 tttgtcatct ccattgacac catctccttt gatttcaagg tgatgtttga ggcaccatca
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 1620
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 1680
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<210> 5670

<211> 591

<212> PRT

<213> Homo sapiens

<400> 5670

Phe	Val	Leu	Ser	Pro	Gly	Thr	Asp	Pro	Ala	Ala	Asp	Leu	Tyr	Lys	Phe
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Ala	Glu	Glu	Met	Lys	Phe	Ser	Lys	Lys	Leu	Ser	Ala	Ile	Ser	Leu	Gly
			20					25						30	
Gln	Gly	Gln	Gly	Pro	Arg	Ala	Glu	Ala	Met	Met	Arg	Ser	Ser	Ile	Glu
			35					40						45	
Arg	Gly	Lys	Trp	Val	Phe	Phe	Gln	Asn	Cys	His	Leu	Ala	Pro	Ser	Trp
			50					55						60	
Met	Pro	Ala	Leu	Glu	Arg	Leu	Ile	Glu	His	Ile	Asn	Pro	Asp	Lys	Val
His	Arg	Asp	Phe	Arg	Leu	Trp	Leu	Thr	Ser	Leu	Pro	Ser	Asn	Lys	Phe
Pro	Val	Ser	Ile	Leu	Gln	Asn	Gly	Ser	Lys	Met	Thr	Ile	Glu	Pro	Pro
Arg	Gly	Val	Arg	Ala	Asn	Leu	Leu	Lys	Ser	Tyr	Ser	Ser	Leu	Gly	Glu
Asp	Phe	Leu	Asn	Ser	Cys	His	Lys	Val	Met	Glu	Phe	Lys	Ser	Leu	Leu

130					135					140					
Leu	Ser	Leu	Cys	Leu	Phe	His	Gly	Asn	Ala	Leu	Glu	Arg	Arg	Lys	Phe
145					150					155					160
Gly	Pro	Leu	Gly	Phe	Asn	Ile	Pro	Tyr	Glu	Phe	Thr	Asp	Gly	Asp	Leu
				165					170					175	
Arg	Ile	Cys	Ile	Ser	Gln	Leu	Lys	Met	Phe	Leu	Asp	Glu	Tyr	Asp	Asp
			180					185					190		
Ile	Pro	Tyr	Lys	Val	Leu	Lys	Tyr	Thr	Ala	Gly	Glu	Ile	Asn	Tyr	Gly
		195					200					205			
Gly	Arg	Val	Thr	Asp	Asp	Trp	Asp	Arg	Arg	Cys	Ile	Met	Asn	Ile	Leu
	210					215					220				
Glu	Asp	Phe	Tyr	Asn	Pro	Asp	Val	Leu	Ser	Pro	Glu	His	Ser	Tyr	Ser
225					230					235					240
Ala	Ser	Gly	Ile	Tyr	His	Gln	Ile	Pro	Pro	Thr	Tyr	Asp	Leu	His	Gly
			245					250						255	
Tyr	Leu	Ser	Tyr	Ile	Lys	Ser	Leu	Pro	Leu	Asn	Asp	Met	Pro	Glu	Ile
			260					265					270		
Phe	Gly	Leu	His	Asp	Asn	Ala	Asn	Ile	Thr	Phe	Ala	Gln	Asn	Glu	Thr
	275						280					285			
Phe	Ala	Leu	Leu	Gly	Thr	Ile	Ile	Gln	Leu	Gln	Pro	Lys	Ser	Ser	Ser
	290					295					300				
Ala	Gly	Ser	Gln	Gly	Arg	Glu	Glu	Ile	Val	Glu	Asp	Val	Thr	Gln	Asn
305					310					315					320
Ile	Leu	Leu	Lys	Val	Pro	Glu	Pro	Ile	Asn	Leu	Gln	Trp	Val	Met	Ala
			325						330					335	
Lys	Tyr	Pro	Val	Leu	Tyr	Glu	Glu	Ser	Met	Asn	Thr	Val	Leu	Val	Gln
			340					345					350		
Glu	Val	Ile	Arg	Tyr	Asn	Arg	Leu	Leu	Gln	Val	Ile	Thr	Gln	Thr	Leu
	355						360					365			
Gln	Asp	Leu	Leu	Lys	Ala	Leu	Lys	Gly	Leu	Val	Val	Met	Ser	Ser	Gln
	370					375					380				
Leu	Glu	Leu	Met	Ala	Ala	Ser	Leu	Tyr	Asn	Asn	Thr	Val	Pro	Glu	Leu
385					390					395					400
Trp	Ser	Ala	Lys	Ala	Tyr	Pro	Ser	Leu	Lys	Pro	Leu	Ser	Ser	Trp	Val
			405						410					415	
Met	Asp	Leu	Leu	Gln	Arg	Leu	Asp	Phe	Leu	Gln	Ala	Trp	Ile	Gln	Asp
			420					425					430		
Gly	Ile	Pro	Ala	Val	Phe	Trp	Ile	Ser	Gly	Phe	Phe	Phe	Pro	Gln	Ala
		435					440				445				
Phe	Leu	Thr	Gly	Thr	Leu	Gln	Asn	Phe	Ala	Arg	Lys	Phe	Val	Ile	Ser
	450					455					460				
Ile	Asp	Thr	Ile	Ser	Phe	Asp	Phe	Lys	Val	Met	Phe	Glu	Ala	Pro	Ser
465					470					475					480
Glu	Leu	Thr	Gln	Arg	Pro	Gln	Val	Gly	Cys	Tyr	Ile	His	Gly	Leu	Phe
			485						490	</					

565 570 575
 His Trp Ile Lys Arg Gly Val Ala Leu Ile Cys Ala Leu Asp Tyr
 580 585 590
 <210> 5671
 <211> 818
 <212> DNA
 <213> Homo sapiens
 <400> 5671
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 120
 gttgcctatc tttgtcctct ctcttcgggc ttcgagatga atgtgcagcc ctgttctagg
 180
 tgtgggtatg gggtttatcc tgccgagaag atcagctgta tagatcagat atggcataaa
 240
 gcctgttttc actgtgaagt ttgcaagatg atgctgtctg ttaataactt tgtgagtcac
 300
 cagaaaaagc cgtactgtca cgcccataac cctaagaaca acactttcac cagtgtctat
 360
 cacactccat taaatctaaa tgtgaggaca tttccagagg ccatcagtgg gatccatgac
 420
 caagaagatg gtgaacagtg taaatcagtt tttcattggg acatgaaatc caaggataag
 480
 gaaggtgcac ctaacaggca gccactggca aatgagagag cctattggac tggatatggg
 540
 gaaggggaatg cttgggtgcc aggagctctg ccagaccccg aaattgtaag gatgggttgag
 600
 gctcgaaagt ctcttggtga ggaatataca gaagactatg agcaaccag gggcaagggg
 660
 agctttccag ccatgatcac acctgcttat caaagggccca agaaagccaa ccagctggcc
 720
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 780
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 818

<210> 5672
 <211> 220
 <212> PRT
 <213> Homo sapiens

<400> 5672
 Met Asn Val Gln Pro Cys Ser Arg Cys Gly Tyr Gly Val Tyr Pro Ala
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 Glu Lys Ile Ser Cys Ile Asp Gln Ile Trp His Lys Ala Cys Phe His
 20 25 30
 Cys Glu Val Cys Lys Met Met Leu Ser Val Asn Asn Phe Val Ser His
 35 40 45
 Gln Lys Lys Pro Tyr Cys His Ala His Asn Pro Lys Asn Asn Thr Phe
 50 55 60
 Thr Ser Val Tyr His Thr Pro Leu Asn Leu Asn Val Arg Thr Phe Pro
 65 70 75 80

Glu Ala Ile Ser Gly Ile His Asp Gln Glu Asp Gly Glu Gln Cys Lys
 85 90 95
 Ser Val Phe His Trp Asp Met Lys Ser Lys Asp Lys Glu Gly Ala Pro
 100 105 110
 Asn Arg Gln Pro Leu Ala Asn Glu Arg Ala Tyr Trp Thr Gly Tyr Gly
 115 120 125
 Glu Gly Asn Ala Trp Cys Pro Gly Ala Leu Pro Asp Pro Glu Ile Val
 130 135 140
 Arg Met Val Glu Ala Arg Lys Ser Leu Gly Glu Glu Tyr Thr Glu Asp
 145 150 155 160
 Tyr Glu Gln Pro Arg Gly Lys Gly Ser Phe Pro Ala Met Ile Thr Pro
 165 170 175
 Ala Tyr Gln Arg Ala Lys Lys Ala Asn Gln Leu Ala Ser Gln Val Glu
 180 185 190
 Tyr Lys Arg Gly His Asp Glu Arg Ile Ser Arg Phe Ser Thr Val Ala
 195 200 205
 Asp Thr Pro Glu Leu Leu Arg Ser Lys Ala Trp Gly
 210 215 220

<210> 5673

<211> 1279

<212> DNA

<213> Homo sapiens

<400> 5673

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 120
 ccgagacgat aaaagaacag ttgggtgttt ataggatgcc ctcaaagtga gctggctaag
 180
 tgagctgggc tctaacttca ctcaaaaatt tatagtacag ctaagaaggc cagtctgtcc
 240
 atgaaaggga gccgagacaa gacgagggcg gcctcttcca ggctgtgcc aagtgtcctt
 300
 ggggtcccg ccatgtccac acttctgcag catccgcaga acatgtggcc gggtcctgcc
 360
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 420
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 480
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 660
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 720
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 780
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 840

gccagactga gcagctcttc tctgcggggg aagaggttct tgcgcttctg agcaccaatg
900
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960
gcattctggc agatatcaaa cgataggcca tgtctggctt tccaataaac cgctggcgga
1020
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1080
gcattgagcaa agaactggag tcatgtattt ccaaccaga cacaaggacg gtgagcctcc
1140
ctggtttaac gtgagactct gttctgtggg aaataacagc aggaattttt atcagtatcc
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1260
gtggtgtctt ccaaagctt
1279

<210> 5674
<211> 81
<212> PRT
<213> Homo sapiens

<400> 5674
Leu His Ser Gln Ile Tyr Ser Thr Ala Lys Lys Ala Ser Leu Ser Met
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Lys Gly Ser Arg Asp Lys Thr Arg Ala Ala Ser Ser Arg Pro Val Pro
20 25 30
Ser Val Leu Gly Val Pro Pro Trp Ser Thr Leu Leu Gln His Pro Gln
35 40 45
Asn Met Trp Pro Gly Pro Ala Gln Gln Gln Gly Gln Pro Ser Gly Arg
50 55 60
Gln Ala Trp Cys Thr Pro Gly Glu Ala Pro Gly Ala Glu Ala Ala Pro
65 70 75 80
Gln

<210> 5675
<211> 1074
<212> DNA
<213> Homo sapiens

<400> 5675
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120
gggctggggc aggggctgag gctgaaagca gcagcctgcc tagtgggtga cgccaggggc
180
cgggtgtaaca tggcaccgag gttggggcca cagcaatgtg tgggacggtg ggggaggctg
240
gggccccttg ctccaagcat tagttctcca agctctgggc cgttctccta cctccttcaa
300
ggggcaccag ggctacaagg tggtagttga gtattggggc ccgactcctg gggcactgga
360

gtggtctcta ggcccgaggc cccaaggaga gggctgggtt tctgggagag tgctggctct
 420
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 480
 tacaggctgt aggcaggagg agccgtggag tccagggtcca gctccccaaa gggcaggggc
 540
 aaccgcatgc ccagtgggta ctgcacggag ctgtaggagg tcacagtgt gtgtacaggg
 600
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 720
 cacagcagaa gcaggaggac cgccagcagg atgagcctag gagagcaagg ctctaccact
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 960
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<210> 5676

<211> 145

<212> PRT

<213> Homo sapiens

<400> 5676

Glu	Val	Thr	Val	Leu	Cys	Thr	Gly	Leu	Ser	Leu	Ser	Ile	Gly	Met	Thr
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			20					25					30		
Ala	Cys	Phe	Arg	Arg	Gln	Gln	Asn	Arg	Thr	Gln	Pro	Ala	Val	Thr	Pro
		35					40					45			
His	Ser	Arg	Ser	Arg	Arg	Thr	Ala	Ser	Arg	Met	Ser	Leu	Gly	Glu	Gln
	50					55				60					
Gly	Ser	Thr	Thr	Gly	Leu	Thr	Leu	Gly	His	Arg	Ala	Pro	Ala	Pro	Trp
65					70					75				80	
Gly	Met	Ser	Trp	His	Asn	His	Arg	Arg	Gln	Val	Asn	Arg	Ile	Lys	Ser
				85					90					95	
Arg	Gln	Cys	Leu	Ser	Met	Ser	Glu	Thr	Ala	Val	Ala	Arg	Ala	Trp	Pro
			100					105					110		
Arg	Ala	Ala	Gly	Pro	Ala	Leu	Ala	Ile	Ser	Pro	Gly	Leu	Ala	Arg	Gly
		115					120					125			
Gly	Leu	Gly	Leu	Thr	Pro	Arg	Thr	Arg	Cys	Pro	Gln	Arg	Val	Pro	His
	130					135					140				

Cys
 145

<210> 5677

<211> 477

<212> DNA

<213> Homo sapiens

<400> 5677

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120
agggaaagca agatgcagca gtgaggccct ctctggtatc cattcattca cttcactcaa
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300
gccgcccgtg ccccgacccc ggatctgcat gtggaagtac ctggacgtcc attccatgca
360
ccagctggag aagaccacca atgctgagat gagggagggtg ctggctgagc tgctggagct
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477

<210> 5678

<211> 151

<212> PRT

<213> Homo sapiens

<400> 5678

Met	Ala	Ser	Leu	Arg	Leu	Cys	Ser	Gly	His	Pro	Ser	Ser	Ser	Ser	Ser
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Ala	Ser	Thr	Ser	Leu	Ile	Ser	Ala	Leu	Val	Val	Phe	Ser	Ser	Trp	Cys
			20					25						30	
Met	Glu	Trp	Thr	Ser	Arg	Tyr	Phe	His	Met	Gln	Ile	Arg	Gly	Arg	Gly
		35					40					45			
Ser	Gly	Gly	Cys	Gly	Lys	Lys	Ala	Asn	Trp	Gly	Arg	Gln	Gln	Gly	Phe
	50					55					60				
Ser	Leu	Glu	Gln	Thr	Ser	Ala	Ala	Cys	Ala	Leu	Leu	Gln	Asp	Leu	His
65				70						75				80	
Lys	Ala	Cys	Ile	Ala	His	Gly	His	Lys	Gln	Leu	Leu	Ser	Glu	Val	Asn
			85					90						95	
Glu	Trp	Ile	Pro	Glu	Arg	Ala	Ser	Leu	Leu	His	Leu	Ala	Phe	Pro	Thr
		100						105					110		
Ser	Asn	Pro	Leu	Gly	Gln	Arg	Gly	Gly	Val	Leu	Pro	Leu	Leu	His	Gln
	115					120					125				
Cys	Pro	Phe	Leu	Pro	Trp	Ser	Gln	Ala	Ala	Ser	Phe	Gln	His	Arg	Pro
	130					135					140				
Leu	Gln	Arg	Gly	Thr	Ala	Ala									
145					150										

<210> 5679

<211> 665

<212> DNA

<213> Homo sapiens

<400> 5679

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120
tccacctccc agcatgctgg ctccaattcc acctctcagc agcctagccc tgaatccaca
180
ccacagcagc ctagtctctga atccacacca cagcagccta gccctgaatc cacaccacag
240
cattccagcc ttgaaaccac ctcccggcag ccagcattcc aagcccttcc agcaccggaa
300
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420
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480
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540
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660
aaaaa
665

<210> 5680
<211> 143
<212> PRT
<213> Homo sapiens

<400> 5680
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20 25 30
Ser Gln Gln Pro Ser Pro Glu Ser Thr Pro Gln Gln Pro Ser Pro Glu
35 40 45
Ser Thr Pro Gln Gln Pro Ser Pro Glu Ser Thr Pro Gln His Ser Ser
50 55 60
Leu Glu Thr Thr Ser Arg Gln Pro Ala Phe Gln Ala Leu Pro Ala Pro
65 70 75 80
Glu Ile Arg Arg Ser Ser Cys Cys Leu Leu Ser Pro Asp Ala Asn Val
85 90 95
Lys Ala Ala Pro Gln Ser Arg Lys Ala Glu Asn Leu Gln Glu Asn Pro
100 105 110
Pro Val Ile Val Thr Arg Val Leu Gln Ala Leu Gly Thr Val Ala Val
115 120 125
Ala Leu Gly Ala Leu Gly Ala Ala Tyr Tyr Ile Thr Glu Ser Leu
130 135 140

<210> 5681
<211> 1402
<212> DNA
<213> Homo sapiens

<400> 5681

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120
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180
gagggtcttc tgcaggaagg acaccgatta tggattggca acctggaccc caaaattacc
240
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300
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360
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420
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480
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540
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600
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660
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720
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780
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840
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900
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960
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1020
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1140
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1200
ctggactgaa aaagagaaag ttcttggcaa aaaggagctg attctttgaa caaatgttgt
1260
agtaatctgt ttaagaatta tgcttattgt ttcaaaatcc caactaggaa aacatggtgt
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1402

<210> 5682

<211> 190

<212> PRT

<213> Homo sapiens

<400> 5682

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Ser Glu Gly Ser Leu Gln Glu Gly His Arg Leu Trp Ile Gly Asn Leu
20 25 30
Asp Pro Lys Ile Thr Glu Tyr His Leu Leu Lys Leu Leu Gln Lys Phe
35 40 45
Gly Lys Val Lys Gln Phe Asp Phe Leu Phe His Lys Ser Gly Ala Leu
50 55 60
Glu Gly Gln Pro Arg Gly Tyr Cys Phe Val Asn Phe Glu Thr Lys Gln
65 70 75 80
Glu Ala Glu Gln Ala Ile Gln Cys Leu Asn Gly Lys Leu Ala Leu Ser
85 90 95
Lys Lys Leu Val Val Arg Trp Ala His Ala Gln Val Lys Arg Tyr Asp
100 105 110
His Asn Lys Asn Asp Lys Ile Leu Pro Ile Ser Leu Glu Pro Ser Ser
115 120 125
Ser Thr Glu Pro Thr Gln Ser Asn Leu Ser Val Thr Ala Lys Ile Lys
130 135 140
Ala Ile Glu Ala Lys Leu Lys Met Met Ala Glu Asn Pro Asp Ala Glu
145 150 155 160
Tyr Pro Ala Ala Pro Val Tyr Ser Tyr Phe Lys Pro Pro Asp Lys Lys
165 170 175
Arg Thr Thr Pro Tyr Ser Arg Thr Ala Trp Lys Ser Arg Arg
180 185 190

<210> 5683

<211> 328

<212> DNA

<213> Homo sapiens

<400> 5683

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120
atgcttttcag aaggcaccac atgtgatgca cagcctctat ttacatgtga ataattacac
180
tgctgctttc tgggtaaaag tagggaaata cagtgttcca gggcatagga atgggtgctct
240
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300
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328

<210> 5684

<211> 103

<212> PRT

<213> Homo sapiens

<400> 5684

Met Lys Phe Val Tyr Phe Lys Ala Leu Leu Thr Lys Pro Ala Ser His

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Gln	Gln	Asn	Lys	Leu	Phe	Tyr	Pro	Glu	His	His	Ser	Tyr	Ala	Leu	Glu
		20		25		30									
His	Cys	Ile	Ser	Leu	Leu	Leu	Thr	Arg	Lys	Gln	Gln	Cys	Asn	Tyr	Ser
		35		40		45									
His	Val	Asn	Arg	Gly	Cys	Ala	Ser	His	Val	Val	Pro	Ser	Glu	Ser	Ile
		50		55		60									
Gly	Trp	Ile	Val	Cys	Val	Pro	Trp	Leu	Met	Leu	Thr	His	Gln	Tyr	Arg
65				70		75								80	
Ser	Ala	Leu	Arg	Val	Cys	Arg	Asp	Gly	Gln	Cys	Leu	Thr	Ala	Glu	Ala
			85			90								95	
Ser	Leu	Gly	Gln	Arg	Met	Asp									
			100												

<210> 5685

<211> 604

<212> DNA

<213> Homo sapiens

<400> 5685

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120
gagcggcagg agtggaagcg cttcatcgag gagcggctgc tcatgtactc cttcgtcaat
180
gacaagtatg ttccctccca gagggcctga cagacttggg gtccacaggg gaagccagag
240
gtgcccttgg caaggggtgga gctgggggct gggctctgcg gggccctgtg gccatgggag
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360
aatcagacc gggaccaggg aggctgtggg gtggagagag tggctaattt gggagataga
420
gccgtagcac ttatgagggg atgtatgtgg ttgatgggtc caggtggcct ctctacgaac
480
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604

<210> 5686

<211> 69

<212> PRT

<213> Homo sapiens

<400> 5686

Pro	Cys	Ser	Arg	Val	Gly	Gly	Lys	Arg	Val	Val	Cys	Tyr	Asp	Asp	Arg
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Phe	Ile	Val	Lys	Leu	Ala	Tyr	Glu	Ser	Asp	Gly	Ile	Val	Val	Ser	Asn
			20				25					30			
Asp	Thr	Tyr	Arg	Asp	Leu	Gln	Gly	Glu	Arg	Gln	Glu	Trp	Lys	Arg	Phe

35 40 45
Ile Glu Glu Arg Leu Leu Met Tyr Ser Phe Val Asn Asp Lys Tyr Val
50 55 60
Pro Ser Gln Arg Pro
65

<210> 5687
<211> 328
<212> DNA
<213> Homo sapiens

<400> 5687
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120
ggtggatccg aaactctggc tgacgggaag agctgtgaga atgtggatga atgtgtgggc
180
ctgcagccgg tgtgccccca ggggaccaca tgcataca cgggtggaag cttccagtgt
240
gtcagccctg agtgccccga gggcagcggc aatgtgagct acgtgaagac gtctccattc
300
cagtgtgagc ggaaccctg ccccatgg
328

<210> 5688
<211> 109
<212> PRT
<213> Homo sapiens

<400> 5688
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Gly Gly Glu Arg Pro Arg Leu Cys Met His Ala Cys Val Asn Thr Pro
20 25 30
Gly Ser Ser Arg Cys Thr Cys Pro Gly Gly Ser Glu Thr Leu Ala Asp
35 40 45
Gly Lys Ser Cys Glu Asn Val Asp Glu Cys Val Gly Leu Gln Pro Val
50 55 60
Cys Pro Gln Gly Thr Thr Cys Ile Asn Thr Gly Gly Ser Phe Gln Cys
65 70 75 80
Val Ser Pro Glu Cys Pro Glu Gly Ser Gly Asn Val Ser Tyr Val Lys
85 90 95
Thr Ser Pro Phe Gln Cys Glu Arg Asn Pro Cys Pro Met
100 105

<210> 5689
<211> 1897
<212> DNA
<213> Homo sapiens

<400> 5689
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120
tgtgtggtgg tcttcagcca ggctcctagt gggagagccc cactcagccc cagtttgaac
180
tctcgcccat cacctatcag tgccactncc tccagctctc gttcctgaaa cccgagagta
240
ccgctctcag tctccagtaa gaagcatgga tgaagctcct tgtgttaacg gccgctgggg
300
aacactgaga cccagggctc aaaggcagac tcctcagggt cccgggaagg gaggctttcc
360
ccagccagag gagacggctc tcctatcctc aatgggtggga gtttgtctcc aggaacggca
420
gctgtgggtg gctcttcttt ggacagtcct gtacaggcca tatctccaag tactccatct
480
gctgctgaag gatacgacct gaaaatagga ctttctttgg ccccccgcg aggatcaacc
540
agatcagaaa gatctgagat taggatccat agatctgaat tgggatctaa acccgcttcc
600
agtagtaatc ccatggatgg catggacaat aggacagttg ggggaagtat gagacacct
660
cctgaacaga caaatggtgt gcatacccca cctcacgtgg ccagtgcctt tgcaggggccc
720
gtctccccag gtgccctgcg tcggagtctg gaagccatca aagcgatgtc ctccaaaggc
780
ccctcggcct ctgcagcact aagtcctcct cttgggtctt ctccaggctc tcctgggagc
840
cagagtttga gcagtggaga aacagtgcct atccctcgcc cagggcctgc ccaaggagat
900
ggacattcct tacctcccat tgctcgccgc ctgggccacc accctccaca gtccctaaat
960
gttggcaaac ccctatacca gagtatgaac tgcaagccca tgcagatgta cgtgctggac
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1260
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1320
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1380
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1440
aaaaaaaggg agagatttcc atcctgggtc agataaagtt gttgctgtgt tttaacaggg
1500
gctgggctgc ctttttctac cttgctggta actagaccaa gaagttagag aatagactaa
1560
catcagtaac ttcccaaaag aaactgaaga gcccctgta aatctttatg tggccttctt
1620
ggagttaaaa aatgaaaggg catatgtaag ttgcaaagggt ggagggtttt agactctcat
1680

gcttcagggtg ctgtcggggt aaaagtaact gtttttcccc ttctcttaaa accacagagg
1740
acctgtgaca gctctgcaga aatgccagtg cctggccccc tcttgccctt tatggctgag
1800
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1860
gtttatgcag ccaacatctg aaaaaaaaaa aaaaaaa
1897

<210> 5690
<211> 54
<212> PRT
<213> Homo sapiens

<400> 5690
Thr Ile Arg Ile Ile Glu Glu Cys Glu His Trp Ser Phe Val Phe Gln
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Val Gly Gln Cys Val Val Val Phe Ser Gln Ala Pro Ser Gly Arg Ala
20 25 30
Pro Leu Ser Pro Ser Leu Asn Ser Arg Pro Ser Pro Ile Ser Ala Thr
35 40 45
Xaa Ser Ser Ser Arg Ser
50

<210> 5691
<211> 1227
<212> DNA
<213> Homo sapiens

<400> 5691
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120
catcaaaacg aggacgaacc cattcgtgtt agctaccatc ggaatatcca ctataattca
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240
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360
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420
ctcgccaggc cggaggcccc agccagcccc ggaaagccag cgccacatgc agttcggcca
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540
cagcctcgtc acctgagcac cctgagctgc atgctgaatt gggcatgaag ccccttccc
600
caggcactgt tttagctctt gccaaacctc cttcgccctg tgcgccaggt acaagcagtc
660
agttctcggc aggggcccag cgggcaactt ccccccttgt gtccctctac cctgctttgg
720

agtgcgggc cctcattcag cagatgtccc cctctgcctt tggctcgaat gactgggatg
780
atgatgagat cctagcttcg gtgctggcag tgtcccaaca ggaataccta gacagtatga
840
agaaaaacaa agtgcacaga gacccgcccc cagacaagag ttgatggaga cccagggatt
900
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960
acagagacag accaactggc agccaggcag cccagagga gagagacatt cagacagagg
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aaagtctccc tgccctcat tccctccaag atgagaaaaa cttgcgcga cccccgaca
1080
ctgatgccag ggaggtggga ggaagaagtg ggaaatttcc cttcccagta cccccaagaa
1140
cgtctgagcc ttcaatgttg aattttttct ttattaaaat tacttttacc ttataaaatc
1200
aactaatcaa aaatgaaaaa aaaaaaa
1227

<210> 5692
<211> 86
<212> PRT
<213> Homo sapiens

<400> 5692
Lys Arg Lys Asn Asn Cys His Gly Asn His Ile Glu Met Gln Ala Met
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Ala Glu Met Tyr Asn Arg Pro Val Glu Val Tyr Gln Tyr Ser Thr Glu
20 25 30
Pro Ile Asn Thr Phe His Gly Ile His Gln Asn Glu Asp Glu Pro Ile
35 40 45
Arg Val Ser Tyr His Arg Asn Ile His Tyr Asn Ser Val Val Asn Pro
50 55 60
Asn Lys Ala Thr Ile Gly Val Gly Leu Gly Cys His His Ser Asn Gln
65 70 75 80
Gly Leu Gln Ser Ser Leu
85

<210> 5693
<211> 389
<212> DNA
<213> Homo sapiens

<400> 5693
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120
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240
cggaacatga tctacatgag ccgcttgggt atctggggcg agggcacacc cttccggaac
300

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360
atggacatga aggtcagcgg gcatgtaca
389

<210> 5694
<211> 60
<212> PRT
<213> Homo sapiens

<400> 5694
Arg Gln Leu Pro Pro Thr Gly Ala Ser Glu Pro Arg Asn Met Ile Tyr
1 5 10 15
Met Ser Arg Leu Gly Ile Trp Gly Glu Gly Thr Pro Phe Arg Asn Phe
20 25 30
Glu Glu Phe Leu His Ala Ile Glu Lys Arg Gly Val Gly Ala Met Glu
35 40 45
Ile Val Ala Met Asp Met Lys Val Ser Gly His Val
50 55 60

<210> 5695
<211> 1417
<212> DNA
<213> Homo sapiens

<400> 5695
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gccttgccgc aagccctaac cttttccctg ttggagcagc ccccggtgga ggcagaagag
120
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180
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300
catggtgtga gtgttgccct gcgtgggtgac tgcaccatcc tccgtggctt cggggccac
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720
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840

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900
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960
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1020
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1080
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1140
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<210> 5696

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5696

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		20					25					30			
Gln	Pro	Pro	Leu	Glu	Ala	Glu	Glu	Pro	Pro	Asp	Arg	Gly	Thr	Asp	Gly
		35				40					45				
Lys	Ala	Gln	Leu	Val	Val	His	Ser	Ala	Phe	Glu	Gln	Asp	Val	Glu	Glu
	50				55				60						
Leu	Asp	Arg	Ala	Leu	Arg	Ala	Ala	Leu	Glu	Val	His	Val	Gln	Glu	Glu
65			70					75					80		
Thr	Val	Gly	Pro	Trp	Arg	Arg	Thr	Leu	Pro	Ala	Glu	Leu	Arg	Ala	Arg
		85					90					95			
Leu	Glu	Arg	Cys	His	Gly	Val	Ser	Val	Ala	Leu	Arg	Gly	Asp	Cys	Thr
	100				105				110						
Ile	Leu	Arg	Gly	Phe	Gly	Ala	His	Pro	Ala	Arg	Ala	Ala	Arg	His	Leu
	115				120				125						
Val	Ala	Leu	Leu	Ala	Gly	Pro	Trp	Asp	Gln	Ser	Leu	Ala	Phe	Pro	Leu
	130			135				140							
Ala	Ala	Ser	Gly	Pro	Thr	Leu	Ala	Gly	Gln	Thr	Leu	Lys	Gly	Pro	Trp
145			150					155				160			
Asn	Asn	Leu	Glu	Arg	Leu	Ala	Glu	Asn	Thr	Gly	Glu	Phe	Gln	Glu	Val
		165					170				175				
Val	Arg	Ala	Phe	Tyr	Asp	Thr	Leu	Asp	Ala	Ala	Arg	Ser	Ser	Ile	Arg
	180				185				190						
Val	Val	Arg	Val	Glu	Arg	Val	Ser	His	Pro	Leu	Leu	Gln	Gln	Gln	Tyr
	195				200				205						
Glu	Leu	Tyr	Arg	Glu	Arg	Leu	Leu	Gln	Arg	Cys	Glu	Arg	Arg	Pro	Val

210	215	220
Glu Gln Val Leu Tyr His Gly Thr Thr Ala Pro Ala Val Pro Asp Ile		
225	230	235
Cys Ala His Gly Phe Asn Arg Ser Phe Cys Gly Arg Asn Ala Thr Val		240
	245	250
Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg Ala Ser Leu Ser Val Gln		255
	260	265
Asp Arg Tyr Ser Pro Pro Asn Ala Asp Gly His Lys Ala Val Phe Val		270
	275	280
Ala Arg Val Leu Thr Gly Asp Tyr Gly Gln Gly Arg Arg Gly Leu Arg		285
	290	295
Ala Pro Pro Leu Arg Gly Pro Gly His Val Leu Leu Arg Tyr Asp Ser		300
305	310	315
Ala Val Asp Cys Ile Cys Gln Pro Ser Ile Phe Val Ile Phe His Asp		320
	325	330
Thr Gln Ala Leu Pro Thr His Leu Ile Thr Cys Glu His Val Pro Arg		335
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Ala Ser Pro Asp Asp Pro Ser Gly Leu Pro Gly Arg Ser Pro Asp Thr		350
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<210> 5697

<211> 3362

<212> DNA

<213> Homo sapiens

<400> 5697

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 780
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 840

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900
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1920
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1980
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2100
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2160
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2220
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2340
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2400
ccagctgaaa gccctccgg gaggcagggt ggaaggcagg caccacggca ggttttccgc
2460
gatgatgtca cctagcaggg cttcaggggt tcccactagg atgcagagat gacctctcgc
2520

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 2580
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 2700
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<210> 5698

<211> 403

<212> PRT

<213> Homo sapiens

<400> 5698

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			20					25					30		
Thr	Ser	Arg	Gly	Cys	Gly	Leu	Asp	Leu	Leu	Pro	Gln	Tyr	Val	Ser	Leu
			35				40					45			
Cys	Asp	Leu	Asp	Ala	Ile	Trp	Gly	Ile	Val	Val	Glu	Ala	Val	Ala	Gly
		50				55				60					
Ala	Gly	Ala	Leu	Ile	Thr	Leu	Leu	Leu	Met	Leu	Ile	Leu	Leu	Val	Arg
65					70				75					80	
Leu	Pro	Phe	Ile	Lys	Glu	Lys	Glu	Lys	Lys	Ser	Pro	Val	Gly	Leu	His
				85				90						95	
Phe	Leu	Phe	Leu	Leu	Gly	Thr	Leu	Gly	Leu	Phe	Gly	Leu	Thr	Phe	Ala
			100					105					110		
Phe	Ile	Ile	Gln	Glu	Asp	Glu	Thr	Ile	Cys	Ser	Val	Arg	Arg	Phe	Leu
		115					120					125			
Trp	Gly	Val	Leu	Phe	Ala	Leu	Cys	Phe	Ser	Cys	Leu	Leu	Ser	Gln	Ala

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Gln Leu Val Gly Leu Ala Leu Cys Leu Met Leu Val Gln Val Ile Ile					
	165	170	175		
Ala Val Glu Trp Leu Val Leu Thr Val Leu Arg Asp Thr Arg Pro Ala					
	180	185	190		
Cys Ala Tyr Glu Pro Met Asp Phe Val Met Ala Leu Ile Tyr Asp Met					
	195	200	205		
Val Leu Leu Val Val Thr Leu Gly Leu Ala Leu Phe Thr Leu Cys Gly					
	210	215	220		
Lys Phe Lys Arg Trp Lys Leu Asn Gly Ala Phe Leu Leu Ile Thr Ala					
225	230	235	240		
Phe Leu Ser Val Leu Ile Trp Val Ala Trp Met Thr Met Tyr Leu Phe					
	245	250	255		
Gly Asn Val Lys Leu Gln Gln Gly Asp Ala Trp Asn Asp Pro Thr Leu					
	260	265	270		
Ala Ile Thr Leu Ala Ala Ser Gly Trp Val Phe Val Ile Phe His Ala					
	275	280	285		
Ile Pro Glu Ile His Cys Thr Leu Leu Pro Ala Leu Gln Glu Asn Thr					
	290	295	300		
Pro Asn Tyr Phe Asp Thr Ser Gln Pro Arg Met Arg Glu Thr Ala Phe					
305	310	315	320		
Glu Glu Asp Val Gln Leu Pro Arg Ala Tyr Met Glu Asn Lys Ala Phe					
	325	330	335		
Ser Met Asp Glu His Asn Ala Ala Leu Arg Thr Ala Gly Phe Pro Asn					
	340	345	350		
Gly Ser Leu Gly Lys Arg Pro Ser Gly Ser Leu Gly Lys Arg Pro Ser					
	355	360	365		
Ala Pro Phe Arg Ser Asn Val Tyr Gln Pro Thr Glu Met Ala Val Val					
	370	375	380		
Leu Asn Gly Gly Thr Ile Pro Thr Ala Pro Pro Ser His Thr Gly Arg					
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His Leu Trp					

<210> 5699
 <211> 1565
 <212> DNA
 <213> Homo sapiens

<400> 5699
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 aatgggttgct ctttaaaagt tagaatctca agagatacca aaagcactta agagttacca
 180
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 240
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 300
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 360

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480
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540
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720
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1380
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<210> 5700

<211> 197

<212> PRT

<213> Homo sapiens

<400> 5700

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Ser	Gln	Ala	Asp	Ser	Lys	Lys	Lys	Ser	Asn	Leu	Met	Met	Ser	Leu	Phe
			20					25					30		
Glu	Pro	Gly	Pro	Glu	Pro	Leu	Pro	Trp	Leu	Gly	Lys	Met	Ala	Gln	Leu

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 Gly Pro Ile Ser Asp Ala Lys Glu Asn Pro Tyr Gly Glu Asp Asp Asn
 50 55 60
 Lys Ser Pro Phe Pro Leu Gln Pro Lys Asn Lys Arg Ser Tyr Ala Gln
 65 70 75 80
 Asn Val Thr Val Trp Ile Lys Pro Ser Gly Leu Gln Thr Asp Val Gln
 85 90 95
 Lys Ile Leu Arg Asn Ala Arg Lys Leu Pro Glu Lys Thr Gln Thr Phe
 100 105 110
 Tyr Lys Glu Leu Asn Arg Leu Arg Lys Ala Ala Leu Ala Phe Gly Phe
 115 120 125
 Leu Asp Leu Leu Lys Gly Val Ala Asp Met Leu Glu Arg Glu Cys Thr
 130 135 140
 Leu Leu Pro Glu Thr Ala His Pro Asp Ala Ala Phe Gln Leu Thr His
 145 150 155 160
 Ala Ala Gln Gln Leu Lys Leu Ala Ser Thr Gly Thr Ser Glu Tyr Ala
 165 170 175
 Ala Tyr Asp Gln Asn Ile Thr Pro Leu His Thr Asp Phe Ser Gly Ser
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 Ser Thr Glu Arg Ile
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<210> 5701
 <211> 1885
 <212> DNA
 <213> Homo sapiens

<400> 5701
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<210> 5702
<211> 348
<212> PRT
<213> Homo sapiens

<400> 5702
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35 40 45
Leu Leu Leu Ile Pro Asn Val Leu Phe Leu Ile Phe Leu Leu Trp Lys
50 55 60
Leu Pro Ser Ala Arg Ala Lys Ile Arg Ile Thr Ser Ser Pro Ile Phe

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Ile Thr Phe Tyr Ile Leu Val Phe Val Val Ala Leu Val Gly Ile Ala
      85           90           95
Arg Ala Val Val Ser Met Thr Val Ser Thr Ser Asn Ala Ala Thr Val
      100          105          110
Ala Asp Lys Ile Leu Trp Glu Ile Thr Arg Phe Phe Leu Leu Ala Ile
      115          120          125
Glu Leu Ser Val Ile Ile Leu Gly Leu Ala Phe Gly His Leu Glu Ser
      130          135          140
Lys Ser Ser Ile Lys Arg Val Leu Ala Ile Thr Thr Val Leu Ser Leu
      145          150          155          160
Ala Tyr Ser Val Thr Gln Gly Thr Leu Glu Ile Leu Tyr Pro Asp Ala
      165          170          175
His Leu Ser Ala Glu Asp Phe Asn Ile Tyr Gly His Gly Gly Arg Gln
      180          185          190
Phe Trp Leu Val Ser Ser Cys Phe Phe Phe Leu Val Tyr Ser Leu Val
      195          200          205
Val Ile Leu Pro Lys Thr Pro Leu Lys Glu Arg Ile Ser Leu Pro Ser
      210          215          220
Arg Arg Ser Phe Tyr Val Tyr Ala Gly Ile Leu Ala Leu Leu Asn Leu
      225          230          235          240
Leu Gln Gly Leu Gly Ser Val Leu Leu Cys Phe Asp Ile Ile Glu Gly
      245          250          255
Leu Cys Cys Val Asp Ala Thr Thr Phe Leu Tyr Phe Ser Phe Phe Ala
      260          265          270
Pro Leu Ile Tyr Val Ala Phe Leu Arg Gly Phe Phe Gly Ser Glu Pro
      275          280          285
Lys Ile Leu Phe Xaa Leu Gln Met Pro Ser Gly Arg Asp Arg Gly Ala
      290          295          300
Arg Cys Thr Pro Thr Pro Ala Leu Arg Cys Gly Pro Ala Gly Gly Pro
      305          310          315          320
Gly Gly Cys Arg Gly Cys Trp Gly Leu Ser Cys Gln Leu Leu Glu His
      325          330          335
Ala Val Arg Leu Cys Arg Arg Gly Gly Leu Pro Gly
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<210> 5703
 <211> 1496
 <212> DNA
 <213> Homo sapiens

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 1380
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<210> 5704

<211> 269

<212> PRT

<213> Homo sapiens

<400> 5704

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			20					25					30		
Glu	Gly	Ser	Val	Leu	Arg	Arg	Gly	Phe	Gln	Thr	Cys	Glu	His	Trp	Lys
			35				40					45			
Gln	Ile	Phe	Met	Glu	Ile	Val	Gly	Val	Gln	Ser	Ala	Leu	Cys	Gly	Leu
	50					55					60				
Val	Leu	Ser	Leu	Leu	Ile	Cys	Val	Ala	Ala	Val	Ala	Val	Phe	Thr	Thr

65		70		75		80									
His	Ile	Leu	Leu	Leu	Leu	Pro	Val	Leu	Leu	Ser	Ile	Leu	Gly	Ile	Val
		85				90								95	
Cys	Leu	Val	Val	Thr	Ile	Met	Tyr	Trp	Ser	Gly	Trp	Glu	Met	Gly	Ala
		100						105					110		
Val	Glu	Ala	Ile	Ser	Leu	Ser	Ile	Leu	Val	Gly	Ser	Ser	Val	Asp	Tyr
		115					120					125			
Cys	Val	His	Leu	Val	Glu	Gly	Tyr	Leu	Leu	Ala	Gly	Glu	Asn	Leu	Pro
		130				135					140				
Pro	His	Gln	Ala	Glu	Asp	Ala	Arg	Thr	Gln	Arg	Gln	Trp	Arg	Thr	Leu
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Glu	Ala	Val	Arg	His	Val	Gly	Val	Ala	Ile	Val	Ser	Ser	Ala	Leu	Thr
			165					170						175	
Thr	Val	Ile	Ala	Thr	Val	Pro	Leu	Phe	Phe	Cys	Ile	Ile	Ala	Pro	Phe
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		195					200					205			
Tyr	Thr	Leu	Thr	Val	Ser	Thr	Ala	Leu	Leu	Gly	Ile	Met	Ala	Pro	Ser
		210				215					220				
Ser	Phe	Thr	Arg	Thr	Arg	Thr	Ser	Phe	Leu	Lys	Ala	Leu	Gly	Ala	Val
		225			230					235				240	
Leu	Leu	Ala	Gly	Ala	Leu	Gly	Leu	Gly	Ala	Cys	Leu	Val	Leu	Leu	Gln
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<210> 5705

<211> 768

<212> DNA

<213> Homo sapiens

<400> 5705

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660

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<210> 5706
<211> 202
<212> PRT
<213> Homo sapiens

<400> 5706
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35 40 45
His Thr Asn Arg Thr Thr Ser Trp Ile Asp Pro Arg Asp Arg Tyr Thr
50 55 60
Lys Pro Leu Thr Phe Ala Asp Cys Ile Ser Asp Glu Leu Pro Leu Gly
65 70 75 80
Trp Glu Glu Ala Tyr Asp Pro Gln Val Gly Asp Tyr Phe Ile Asp His
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Asn Thr Lys Thr Thr Gln Ile Glu Asp Pro Arg Val Gln Trp Arg Arg
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Glu Gln Glu His Met Leu Lys Asp Tyr Leu Val Val Ala Gln Glu Ala
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130 135 140
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145 150 155 160
Leu Gly Ser Gln Val Ser Leu Val Ser Gly Ser Ser Ser Ser Ser Lys
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<210> 5707
<211> 6988
<212> DNA
<213> Homo sapiens

<400> 5707
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<212> PRT

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<400> 5708

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

<400> 5711

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 1142

<210> 5712

<211> 145

<212> PRT

<213> Homo sapiens

<400> 5712

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Arg	Ile	Leu	Phe	His	Gly	Val	Phe	Tyr	Ala	Gly	Gly	Phe	Ala	Ile	Val
			20					25					30		
Tyr	Tyr	Leu	Ile	Gln	Lys	Phe	His	Ser	Arg	Ala	Leu	Tyr	Tyr	Lys	Leu
		35					40					45			

Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly
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 Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
 65 70 75 80
 Val Asp Ile Val Asp Ala Lys Leu Lys Ile Pro Val Ser Gly Ser Lys
 85 90 95
 Ser Glu Gly Leu Leu Tyr Val His Ser Ser Arg Gly Gly Pro Phe Gln
 100 105 110
 Arg Trp His Leu Asp Glu Val Phe Leu Glu Leu Lys Asp Gly Gln Gln
 115 120 125
 Ile Pro Val Phe Lys Leu Ser Gly Glu Asn Gly Asp Glu Val Lys Lys
 130 135 140
 Glu
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<210> 5713

<211> 1996

<212> DNA

<213> Homo sapiens

<400> 5713

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 180
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 240
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<210> 5714

<211> 408

<212> PRT

<213> Homo sapiens

<400> 5714

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			20					25					30		
Val	Ser	Glu	Phe	Phe	Met	Asn	Ala	Lys	Lys	Asn	Lys	Pro	Glu	Trp	Arg
			35				40					45			
Glu	Glu	Gln	Met	Ala	Ser	Ile	Lys	Lys	Asp	Tyr	Tyr	Lys	Ala	Leu	Glu
			50				55					60			
Asp	Ala	Asp	Glu	Lys	Val	Gln	Leu	Ala	Asn	Gln	Ile	Tyr	Asp	Leu	Val
65					70					75				80	
Asp	Arg	His	Leu	Arg	Lys	Leu	Asp	Gln	Glu	Leu	Ala	Lys	Phe	Lys	Met

				85					90					95			
Glu	Leu	Glu	Ala	Asp	Asn	Ala	Gly	Ile	Thr	Glu	Ile	Leu	Glu	Arg	Arg		
			100					105					110				
Ser	Leu	Glu	Leu	Asp	Thr	Pro	Ser	Gln	Pro	Val	Asn	Asn	His	His	Ala		
			115					120					125				
His	Ser	His	Thr	Pro	Val	Glu	Lys	Arg	Lys	Tyr	Asn	Pro	Thr	Ser	His		
			130					135					140				
His	Thr	Thr	Thr	Asp	His	Ile	Pro	Glu	Lys	Lys	Phe	Lys	Ser	Glu	Ala		
145						150					155				160		
Leu	Leu	Ser	Thr	Leu	Thr	Ser	Asp	Ala	Ser	Lys	Glu	Asn	Thr	Leu	Gly		
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Cys	Arg	Asn	Asn	Asn	Ser	Thr	Ala	Ser	Ser	Asn	Asn	Ala	Tyr	Asn	Val		
						180									190		
Asn	Ser	Ser	Gln	Pro	Leu	Gly	Ser	Tyr	Asn	Ile	Gly	Ser	Leu	Ser	Ser		
			195					200					205				
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Ser	Met	Ala	Arg	Glu	Thr	Val	Gly	Tyr	Ser	Ser	Ser	Ser	Ala	Leu	Met		
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Gly	Arg	Lys	Ser	Lys	Asn	Asn	Asn	Lys	Ser	Ser	Ser	Gln	Gln	Ser	Ser		
						290							300				
Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Leu	Ser	Ser	Cys	Ser	Ser	Ser	Ser	Thr	
305						310						315				320	
Val	Val	Gln	Glu	Ile	Ser	Gln	Gln	Thr	Thr	Val	Val	Pro	Glu	Ser	Asp		
						325									335		
Ser	Asn	Ser	Gln	Val	Asp	Trp	Thr	Tyr	Asp	Pro	Asn	Glu	Pro	Arg	Tyr		
						340									350		
Cys	Ile	Cys	Asn	Gln	Val	Ser	Tyr	Gly	Glu	Met	Val	Gly	Cys	Asp	Asn		
						355							365				
Gln	Asp	Cys	Pro	Ile	Glu	Trp	Phe	His	Tyr	Gly	Cys	Val	Gly	Leu	Thr		
						370							380				
Glu	Ala	Pro	Lys	Gly	Lys	Trp	Tyr	Cys	Pro	Gln	Cys	Thr	Ala	Ala	Met		
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<210> 5715

<211> 1458

<212> DNA

<213> Homo sapiens

<400> 5715

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120ggggcttggc cgtctagtgt gatgaaggag gcgaccccca aggtgggaag gcgcacgggt
180

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240
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300
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420
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720
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1458

<210> 5716

<211> 148

<212> PRT

<213> Homo sapiens

<400> 5716

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 Glu Cys Leu His Thr Phe Cys Lys Ser Cys Ile Val Lys Tyr Leu Gln
 35 40 45
 Thr Ser Lys Tyr Cys Pro Met Cys Asn Ile Lys Ile His Glu Thr Gln
 50 55 60
 Pro Leu Leu Asn Leu Lys Leu Asp Arg Val Met Gln Asp Ile Val Tyr
 65 70 75 80
 Lys Leu Val Pro Gly Leu Gln Asp Ser Glu Glu Lys Arg Ile Arg Glu
 85 90 95
 Phe Tyr Gln Ser Arg Gly Leu Asp Arg Val Thr Gln Pro Thr Gly Glu
 100 105 110
 Glu Pro Ala Leu Ser Asn Leu Gly Leu Pro Phe Ser Ser Phe Asp His
 115 120 125
 Ser Lys Ala His Tyr Tyr Arg Tyr Asp Glu Gln Leu Asn Leu Cys Leu
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 Glu Arg Leu Arg
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<210> 5717

<211> 1419

<212> DNA

<213> Homo sapiens

<400> 5717

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1419

<210> 5718

<211> 228

<212> PRT

<213> Homo sapiens

<400> 5718

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Leu	Leu	Met	Leu	Gly	Val	Thr	Leu	Pro	Asn	Ser	Tyr	Trp	Arg	Val	Ser
			20					25					30		
Thr	Val	His	Gly	Asn	Val	Ile	Thr	Thr	Asn	Thr	Ile	Phe	Glu	Asn	Leu
		35				40						45			
Trp	Phe	Ser	Cys	Ala	Thr	Asp	Ser	Leu	Gly	Val	Tyr	Asn	Cys	Trp	Glu
	50					55					60				
Phe	Pro	Ser	Met	Leu	Ala	Leu	Ser	Gly	Tyr	Ile	Gln	Ala	Cys	Arg	Ala
65				70					75					80	
Leu	Met	Ile	Thr	Ala	Ile	Leu	Leu	Gly	Phe	Leu	Gly	Leu	Leu	Leu	Gly
			85					90						95	
Ile	Ala	Gly	Leu	Arg	Cys	Thr	Asn	Ile	Gly	Gly	Leu	Glu	Leu	Ser	Arg
		100					105					110			
Lys	Ala	Lys	Leu	Ala	Ala	Thr	Ala	Gly	Ala	Leu	His	Ile	Leu	Ala	Gly
	115					120					125				
Ile	Cys	Gly	Met	Val	Ala	Ile	Ser	Trp	Tyr	Ala	Phe	Asn	Ile	Thr	Arg
	130					135				140					
Asp	Phe	Phe	Asp	Pro	Leu	Tyr	Pro	Gly	Thr	Lys	Tyr	Glu	Leu	Gly	Pro
145				150					155					160	
Ala	Leu	Tyr	Leu	Gly	Trp	Ser	Ala	Ser	Leu	Ile	Ser	Ile	Leu	Gly	Gly
			165					170						175	
Leu	Cys	Leu	Cys	Ser	Ala	Cys	Cys	Cys	Gly	Ser	Asp	Glu	Asp	Pro	Ala
		180						185				190			
Ala	Ser	Ala	Arg	Arg	Pro	Tyr	Gln	Ala	Pro	Val	Ser	Val	Met	Pro	Val
	195					200					205				
Ala	Thr	Ser	Asp	Gln	Glu	Gly	Asp	Ser	Ser	Phe	Gly	Lys	Tyr	Gly	Arg
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Asn	Ala	Tyr	Val												

225

<210> 5719

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 5719

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4884

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2267

<210> 5720

<211> 455

<212> PRT

<213> Homo sapiens

<400> 5720

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Gln	Gln	Gln	Arg	Gly	His	Gly	Ala	Val	His	Ala	Ala	Gly	Gln	Gly	Ala
			20					25					30		
His	Asp	Val	Pro	Gln	Gly	Leu	His	Pro	Pro	Val	Ala	Pro	Ser	Gly	Gly
	35					40					45				
Val	Asp	Ser	Ala	Val	Ala	Ala	Leu	Leu	Leu	Arg	Arg	Arg	Gly	Tyr	Gln
	50				55					60					
Val	Thr	Gly	Val	Phe	Met	Lys	Asn	Trp	Asp	Ser	Leu	Asp	Glu	His	Gly
65				70					75					80	
Val	Cys	Thr	Ala	Asp	Lys	Asp	Cys	Glu	Asp	Ala	Tyr	Arg	Val	Cys	Gln
			85					90						95	
Ile	Leu	Asp	Ile	Pro	Phe	His	Gln	Val	Ser	Tyr	Val	Lys	Glu	Tyr	Trp
	100						105					110			
Asn	Asp	Val	Phe	Ser	Asp	Phe	Leu	Asn	Glu	Tyr	Glu	Lys	Gly	Arg	Thr
	115					120					125				
Pro	Asn	Pro	Asp	Ile	Val	Cys	Asn	Lys	His	Ile	Lys	Phe	Ser	Cys	Phe

130	135	140
Phe His Tyr Ala Val Asp Asn Leu Gly Ala Asp Ala Ile Ala Thr Gly		
145	150	155
His Tyr Ala Arg Thr Ser Leu Glu Asp Glu Glu Val Phe Glu Gln Lys		160
	165	170
His Val Lys Lys Pro Glu Gly Leu Phe Arg Asn Arg Phe Glu Val Arg		175
	180	185
Asn Ala Val Lys Leu Leu Gln Ala Ala Asp Ser Phe Lys Asp Gln Thr		190
	195	200
Phe Phe Leu Ser Gln Val Ser Gln Asp Ala Leu Arg Arg Thr Ile Phe		205
	210	215
Pro Leu Gly Gly Leu Thr Lys Glu Phe Val Lys Lys Ile Ala Ala Glu		220
	225	230
Asn Arg Leu His His Val Leu Gln Lys Lys Glu Ser Met Gly Met Cys		235
	245	250
Phe Ile Gly Lys Arg Asn Phe Glu His Phe Leu Leu Gln Tyr Leu Gln		255
	260	265
Pro Arg Pro Gly His Phe Ile Ser Ile Glu Asp Asn Lys Val Leu Gly		270
	275	280
Thr His Lys Gly Trp Phe Leu Tyr Thr Leu Gly Gln Arg Ala Asn Ile		285
	290	295
Gly Gly Leu Arg Glu Pro Trp Tyr Val Val Glu Lys Asp Ser Val Lys		300
	305	310
Gly Asp Val Phe Val Ala Pro Arg Thr Asp His Pro Ala Leu Tyr Arg		315
	325	330
Asp Leu Leu Arg Thr Ser Arg Val His Trp Ile Ala Glu Glu Pro Pro		335
	340	345
Ala Ala Leu Val Arg Asp Lys Met Met Glu Cys His Phe Arg Phe Arg		350
	355	360
His Gln Met Ala Leu Val Pro Cys Val Leu Thr Leu Asn Gln Asp Gly		365
	370	375
Thr Val Trp Val Thr Ala Val Gln Ala Val Arg Ala Leu Ala Thr Gly		380
	385	390
Gln Phe Ala Val Phe Tyr Lys Gly Asp Glu Cys Leu Gly Ser Gly Lys		395
	405	410
Ile Leu Arg Leu Gly Pro Ser Ala Tyr Thr Leu Gln Lys Gly Gln Arg		415
	420	425
Arg Ala Gly Met Ala Thr Glu Ser Pro Ser Asp Ser Pro Glu Asp Gly		430
	435	440
Pro Gly Leu Ser Pro Leu Leu		445
	450	455

<210> 5721

<211> 400

<212> DNA

<213> Homo sapiens

<400> 5721

ttagacatag ctaaccagac aggcagatca atcagaattc ccccatcaga aagaaaagcc

60

cttatgttag ctatgggata tcatgagaag ggcagagctt tcctgaaaag aaaagaatat

120

ggaatagcct tgccatgtct gttggacgct gacaaatatt tctgggtgggc gcttttgtac

180

ttggtgaaca ccagctttaa ggaagatggc ccagactata cagaacacct gccatgccct
240
tgagactgca gactttcatc tacaacagtg gttaatgtaa aagagtagtt atggtgtaaa
300
ctggtgaatt tcttcttccc ttgtatttc taattgacct ttcctccctg taaagaaaag
360
aattttcaag caggtaggat atgctctctt tttctgtaca
400

<210> 5722
<211> 80
<212> PRT
<213> Homo sapiens

<400> 5722
Leu Asp Ile Ala Asn Gln Thr Gly Arg Ser Ile Arg Ile Pro Pro Ser
1 5 10 15
Glu Arg Lys Ala Leu Met Leu Ala Met Gly Tyr His Glu Lys Gly Arg
20 25 30
Ala Phe Leu Lys Arg Lys Glu Tyr Gly Ile Ala Leu Pro Cys Leu Leu
35 40 45
Asp Ala Asp Lys Tyr Phe Trp Trp Ala Leu Leu Tyr Leu Val Asn Thr
50 55 60
Ser Phe Lys Glu Asp Gly Pro Asp Tyr Thr Glu His Leu Pro Cys Pro
65 70 75 80

<210> 5723
<211> 376
<212> DNA
<213> Homo sapiens

<400> 5723
nntaccacat tttcttcttt tcacccaccc cagccaaaac tcagtgcctt caaggctcgg
60
aagaatgtgg agagtcttct agaagcctgt cgaaaaatgg gggatgcctga ggtatggggg
120
ctgctttcta aagagtgggtg gcatgccgga ctacagcggag ccatgtggca tggatgggtg
180
gcttccattt gcagcggatg tctgctctca gatgaaggca caggctgccc ctgcctgccc
240
cagcatgccc cctgcctgc atgccccctg ccctgcatgt cacctgtcct acacatcccc
300
tgccctgcag gcccattctt gtctgcatg tcacctgtcc tgcacatgcc ctgccctgca
360
ctcctcctgc acgcgt
376

<210> 5724
<211> 125
<212> PRT
<213> Homo sapiens

<400> 5724
Xaa Thr Thr Phe Ser Ser Phe His Pro Pro Gln Pro Lys Leu Ser Ala

1	5	10	15
Leu Lys Ala Arg Lys Asn Val Glu Ser Phe Leu Glu Ala Cys Arg Lys			
20	25	30	
Met Gly Val Pro Glu Val Trp Gly Leu Leu Ser Lys Glu Trp Trp His			
35	40	45	
Ala Gly Leu Ser Gly Ala Met Trp His Gly Trp Trp Ala Ser Ile Cys			
50	55	60	
Ser Gly Cys Leu Leu Ser Asp Glu Gly Thr Gly Cys Pro Cys Leu Pro			
65	70	75	80
Gln His Ala Pro Cys Pro Ala Cys Pro Leu Pro Cys Met Ser Pro Val			
85	90	95	
Leu His Ile Pro Cys Pro Ala Gly Pro Ile Leu Ser Cys Met Ser Pro			
100	105	110	
Val Leu His Met Pro Cys Pro Ala Leu Leu Leu His Ala			
115	120	125	

<210> 5725

<211> 1160

<212> DNA

<213> Homo sapiens

<400> 5725

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60
ccagccctcc cctgctgct gagaagtggg ggaggggtctc ggctccagg ttcccgcgcc
120
accgcgcacg ggcgagcatg gggggcaagc agagcacggc gaccgcctcc cgggggcccc
180
ttcccggggg tctccaccga tgacagcgcc gtgcccgcgc cgggaggggc gccccatttc
240
gggcactacc ggacgggagg cggggccatg gggctgcgca gcgcatcggc cagctcgggtg
300
gcaggcatgg gcatggaccc cagcacggcc ggggggggtgc cttttggcct ctacaccccc
360
gcctcccggg gcaccggcga ctccgagagg gcgcccggcg gcggagggtc tgcgcccgac
420
tccacctatg cccatggcaa tggttaccag gagacgggcg gcggtcacca tagagacggg
480
atgctgtacc tgggctcccg agcctcgctg gcggatgctc tacctctgca catcgacccc
540
aggtgggttc gctcgcatag tggtttcaag tgccccattt gctccaagtc tgtggcttct
600
gacgagatgg aaatgcactt tataatgtgt ttgagcaaac ctgcctctc ctacaacgat
660
gatgtgctga ctaaagacgc gggtgagtgt gtgatctgcc tggaggagct gctgcagggg
720
gacacgatag ccaggctgcc ctgcctgtgc atctatcaca aaagctgcat agactcgtgg
780
tttgaagtga acagatcttg tccggaacac cctgcggact gacctgcggg cttgcttget
840
gactcctctc aaagggacag agcgcccctg ctccagggag gaggtccacc ggaccctggg
900
gcagagctga gcttgggaca ccagcgggaa cagggcacc cttctgcact gacttccaga
960

tcattggttct cccttcctcc ctgaggacac caaattggat gagagcaagt ttgagagaag
1020
aatgaatcaa ctgctatcct tcccctcacc cctcagccca ggagggaaaag ggcattttct
1080
ttttcatctt tgaaaggcat tgtgggtctg tctttaaagt gtttacaaaa aaattatata
1140
aaaaaaagtc tagtgtcgac
1160

<210> 5726

<211> 273

<212> PRT

<213> Homo sapiens

<400> 5726

Ala	Phe	Phe	Pro	Phe	Leu	Pro	Pro	Arg	Leu	Leu	Phe	Asp	Ser	Leu	Pro
1				5					10					15	
Leu	Tyr	Ala	Arg	Pro	Ala	Leu	Pro	Leu	Leu	Leu	Arg	Ser	Gly	Gly	Gly
			20					25					30		
Ser	Arg	Pro	Pro	Gly	Ser	Arg	Pro	Thr	Ala	His	Gly	Arg	Ala	Trp	Gly
			35				40					45			
Ala	Ser	Arg	Ala	Arg	Arg	Pro	Ala	Pro	Gly	Gly	Pro	Phe	Pro	Gly	Val
	50					55					60				
Ser	Thr	Asp	Asp	Ser	Ala	Val	Pro	Pro	Pro	Gly	Gly	Ala	Pro	His	Phe
65					70					75				80	
Gly	His	Tyr	Arg	Thr	Gly	Gly	Gly	Ala	Met	Gly	Leu	Arg	Ser	Ala	Ser
			85					90						95	
Val	Ser	Ser	Val	Ala	Gly	Met	Gly	Met	Asp	Pro	Ser	Thr	Ala	Gly	Gly
			100					105					110		
Val	Pro	Phe	Gly	Leu	Tyr	Thr	Pro	Ala	Ser	Arg	Gly	Thr	Gly	Asp	Ser
		115					120					125			
Glu	Arg	Ala	Pro	Gly	Gly	Gly	Gly	Ser	Ala	Ser	Asp	Ser	Thr	Tyr	Ala
	130					135					140				
His	Gly	Asn	Gly	Tyr	Gln	Glu	Thr	Gly	Gly	Gly	His	His	Arg	Asp	Gly
145					150					155				160	
Met	Leu	Tyr	Leu	Gly	Ser	Arg	Ala	Ser	Leu	Ala	Asp	Ala	Leu	Pro	Leu
			165					170					175		
His	Ile	Ala	Pro	Arg	Trp	Phe	Ser	Ser	His	Ser	Gly	Phe	Lys	Cys	Pro
		180					185					190			
Ile	Cys	Ser	Lys	Ser	Val	Ala	Ser	Asp	Glu	Met	Glu	Met	His	Phe	Ile
	195					200					205				
Met	Cys	Leu	Ser	Lys	Pro	Arg	Leu	Ser	Tyr	Asn	Asp	Asp	Val	Leu	Thr
	210				215						220				
Lys	Asp	Ala	Gly	Glu	Cys	Val	Ile	Cys	Leu	Glu	Glu	Leu	Leu	Gln	Gly
225				230						235				240	
Asp	Thr	Ile	Ala	Arg	Leu	Pro	Cys	Leu	Cys	Ile	Tyr	His	Lys	Ser	Cys
			245					250					255		
Ile	Asp	Ser	Trp	Phe	Glu	Val	Asn	Arg	Ser	Cys	Pro	Glu	His	Pro	Ala
		260					265					270			

Asp

<210> 5727

<211> 1237

<212> DNA

<213> Homo sapiens

<400> 5727

ntgagaaggg aggtgaccac caggactggc tctgtgagta ccacacagtg ggaggggggtg
60
ggggccacca tgtcatcata tcagaaggaa ctggagaaat acagagacat agatgaagat
120
gagatcctaa ggaccttgag ccccgaggag ctagagcagc tggactgcga actacaggag
180
atggatcctg agaacatgct cctgccagct ggactaagac aacgtgacca gacaaagaag
240
agcccaacgg ggccactgga ccgagaggcc cttttgcagt acttgagca acaggcacta
300
gaagtcaaag agcgtgatga cttggtgccc ttcacaggcg agaagaaggg gaaaccctat
360
attcagccca agagggaaat cccagcagag gagcagatca ccctggagcc tgagctggag
420
gaggcactgg cacatgccac agatgctgaa atgtgtgaca ttgcagcaat tctggacatg
480
tacacactga tgagtaacaa gcaatactat gatgccctct gcagtggaga aatctgcaac
540
actgaaggca ttagcagtgt ggtacagcct gacaagtata agccagtgcc ggatgaaccc
600
ccaaatccca caaacattga ggagatacta aagaggggtcc gaagcaatga caaggagctg
660
gaggaggtga acttgaataa tatacaggac atcccaatac ccatgctaag tgagctgtgt
720
gaggcaatga aggcaaatac ctatgtgcgg agcttcagtc tggtagccac gaggagtggg
780
gacccattg ccaatgcagt ggctgacatg ttgcgtgaga atcgtagcct ccagagccta
840
aacatcgaat ccaacttcat tagcagcaca ggactcatgg ctgtgctgaa ggcagttcgg
900
gaaaatgcca cactcactga gctccgtgta gacaatcagc gccagtggcc tggatgatgca
960
gtggagatgg agatggccac cgtgctagag cagtgtccct ctattgtccg ctttggctac
1020
cactttacac agcagggggc acgagctcgg gcagcccagg ccatgaccgg aaacaatgaa
1080
ctacgtcgcc agcaaaagaa gagataacac tgcatttccc ttaccaact agcgtggga
1140
gcactggaca cttaaatcct catctgtcct cctttcctgt aaataaaagc ccttctatcc
1200
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa
1237

<210> 5728

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5728

Xaa Arg Arg Glu Val Thr Thr Arg Thr Gly Ser Val Ser Thr Thr Gln

1	5	10	15												
Trp	Glu	Gly	Val	Gly	Ala	Thr	Met	Ser	Ser	Tyr	Gln	Lys	Glu	Leu	Glu
20				25				30							
Lys	Tyr	Arg	Asp	Ile	Asp	Glu	Asp	Glu	Ile	Leu	Arg	Thr	Leu	Ser	Pro
35				40				45							
Glu	Glu	Leu	Glu	Gln	Leu	Asp	Cys	Glu	Leu	Gln	Glu	Met	Asp	Pro	Glu
50				55				60							
Asn	Met	Leu	Leu	Pro	Ala	Gly	Leu	Arg	Gln	Arg	Asp	Gln	Thr	Lys	Lys
65				70				75				80			
Ser	Pro	Thr	Gly	Pro	Leu	Asp	Arg	Glu	Ala	Leu	Leu	Gln	Tyr	Leu	Glu
85				90				95							
Gln	Gln	Ala	Leu	Glu	Val	Lys	Glu	Arg	Asp	Asp	Leu	Val	Pro	Phe	Thr
100				105				110							
Gly	Glu	Lys	Lys	Gly	Lys	Pro	Tyr	Ile	Gln	Pro	Lys	Arg	Glu	Ile	Pro
115				120				125							
Ala	Glu	Glu	Gln	Ile	Thr	Leu	Glu	Pro	Glu	Leu	Glu	Glu	Ala	Leu	Ala
130				135				140							
His	Ala	Thr	Asp	Ala	Glu	Met	Cys	Asp	Ile	Ala	Ala	Ile	Leu	Asp	Met
145				150				155				160			
Tyr	Thr	Leu	Met	Ser	Asn	Lys	Gln	Tyr	Tyr	Asp	Ala	Leu	Cys	Ser	Gly
165				170				175							
Glu	Ile	Cys	Asn	Thr	Glu	Gly	Ile	Ser	Ser	Val	Val	Gln	Pro	Asp	Lys
180				185				190							
Tyr	Lys	Pro	Val	Pro	Asp	Glu	Pro	Pro	Asn	Pro	Thr	Asn	Ile	Glu	Glu
195				200				205							
Ile	Leu	Lys	Arg	Val	Arg	Ser	Asn	Asp	Lys	Glu	Leu	Glu	Glu	Val	Asn
210				215				220							
Leu	Asn	Asn	Ile	Gln	Asp	Ile	Pro	Ile	Pro	Met	Leu	Ser	Glu	Leu	Cys
225				230				235				240			
Glu	Ala	Met	Lys	Ala	Asn	Thr	Tyr	Val	Arg	Ser	Phe	Ser	Leu	Val	Ala
245				250				255							
Thr	Arg	Ser	Gly	Asp	Pro	Ile	Ala	Asn	Ala	Val	Ala	Asp	Met	Leu	Arg
260				265				270							
Glu	Asn	Arg	Ser	Leu	Gln	Ser	Leu	Asn	Ile	Glu	Ser	Asn	Phe	Ile	Ser
275				280				285							
Ser	Thr	Gly	Leu	Met	Ala	Val	Leu	Lys	Ala	Val	Arg	Glu	Asn	Ala	Thr
290				295				300							
Leu	Thr	Glu	Leu	Arg	Val	Asp	Asn	Gln	Arg	Gln	Trp	Pro	Gly	Asp	Ala
305				310				315				320			
Val	Glu	Met	Glu	Met	Ala	Thr	Val	Leu	Glu	Gln	Cys	Pro	Ser	Ile	Val
325				330				335							
Arg	Phe	Gly	Tyr	His	Phe	Thr	Gln	Gln	Gly	Pro	Arg	Ala	Arg	Ala	Ala
340				345				350							
Gln	Ala	Met	Thr	Arg	Asn	Asn	Glu	Leu	Arg	Arg	Gln	Gln	Lys	Lys	Arg
355				360				365							

<210> 5729

<211> 381

<212> DNA

<213> Homo sapiens

<400> 5729

naaattttatt actacggatc acagcagcaa cgggcgggaa gggcggcgcc agactcattt

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gccccgcagg tagatcttgg ggggtctgcca gccttcgggg gcttccttta gccccgcctt
120
cagccagatg cgcctcaggt ctttctcgaa cttgatctgc aagacgcaga gagagggacc
180
gccaaagtaat tcgtggcaaa gaaacgtgtt ctcagcactt tgccctccca gggccaagca
240
gggggccact cacctgcttg cgtctcaggc gtccctcctg gaccttcctc cgcaggaacc
300
gcgtcttctt caccagcttc cggtaacttg ggtgggtcat ctccgcgcg cggatcttca
360
gcacgttttt gcactaaatt t
381

<210> 5730

<211> 64

<212> PRT

<213> Homo sapiens

<400> 5730

Phe	Val	Ala	Lys	Lys	Arg	Val	Leu	Ser	Thr	Leu	Pro	Ser	Gln	Gly	Gln
1				5				10					15		
Ala	Gly	Gly	His	Ser	Pro	Ala	Cys	Val	Ser	Gly	Val	Pro	Pro	Gly	Pro
			20				25					30			
Ser	Ser	Ala	Gly	Thr	Ala	Ser	Ser	Ser	Pro	Ala	Ser	Gly	Thr	Cys	Gly
		35				40					45				
Gly	Ser	Ser	Ser	Ala	Gly	Gly	Ser	Ser	Ala	Arg	Phe	Cys	Thr	Lys	Phe
50						55					60				

<210> 5731

<211> 891

<212> DNA

<213> Homo sapiens

<400> 5731

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gccagtgact tgctcttcct gcggctctac ccggtgctca ccaaggcggc caccagtggc
120
atattgtcag cacttgggaa cttcctggcc cagatgattg agaagaagcg gaaaaaagaa
180
aactctagaa gtctggatgt cgggtgggct ctgagatatg ccgtttacgg gttcttcttc
240
acagggccgc tgagtcactt cttctacttc ttcattggaac attggatccc tctgaggtc
300
cccctggcag ggctcaggag gcttctcctg gaccgcctcg tctttgcacc ggccttcctc
360
atgttgttct tctcatcat gaactttctg gaggggaaag acgcctcagc cttcgccgcc
420
aagatgaggg ggggcttctg gccggcgctg aggatgaact ggcgggtgtg gacgccacta
480
cagttcatca acatcaacta cgtccctctg aagttccggg tgctcttcgc caacctggca
540
gctctgttct ggtatgccta cctggcctcc ttggggaagt gacgaccgct gggagaacat
600

caggtgcact gtggacgtgg gtctgggggt ctcacccgcc cagcgagagc agaaccaatc
660
cagtcaggat gtcactgact ctaaatacagg tgattcaaga tgcccaaaaa tgatggatag
720
agaaacagaa atctctgaat gtcagaaccc tgtcttttaa aaaggcagtc actgccttca
780
gggtggtgctg ccccagaaac ttaaaattta gtcgaggcag tttcaattgt tactgtggac
840
cgaattagga tcacaataaa tgataatgca gggtcttcaa aaaaaaaaaa a
891

<210> 5732

<211> 193

<212> PRT

<213> Homo sapiens

<400> 5732

Pro	Ala	Ala	Ser	Arg	Leu	Arg	Ala	Glu	Ala	Gly	Leu	Gly	Ala	Leu	Pro
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Arg	Arg	Ala	Leu	Ala	Gln	Tyr	Leu	Leu	Phe	Leu	Arg	Leu	Tyr	Pro	Val
			20					25					30		
Leu	Thr	Lys	Ala	Ala	Thr	Ser	Gly	Ile	Leu	Ser	Ala	Leu	Gly	Asn	Phe
		35					40						45		
Leu	Ala	Gln	Met	Ile	Glu	Lys	Lys	Arg	Lys	Lys	Glu	Asn	Ser	Arg	Ser
		50				55					60				
Leu	Asp	Val	Gly	Gly	Pro	Leu	Arg	Tyr	Ala	Val	Tyr	Gly	Phe	Phe	Phe
65					70					75					80
Thr	Gly	Pro	Leu	Ser	His	Phe	Phe	Tyr	Phe	Phe	Met	Glu	His	Trp	Ile
				85						90					95
Pro	Pro	Glu	Val	Pro	Leu	Ala	Gly	Leu	Arg	Arg	Leu	Leu	Leu	Asp	Arg
			100					105						110	
Leu	Val	Phe	Ala	Pro	Ala	Phe	Leu	Met	Leu	Phe	Phe	Leu	Ile	Met	Asn
		115					120					125			
Phe	Leu	Glu	Gly	Lys	Asp	Ala	Ser	Ala	Phe	Ala	Ala	Lys	Met	Arg	Gly
		130				135						140			
Gly	Phe	Trp	Pro	Ala	Leu	Arg	Met	Asn	Trp	Arg	Val	Trp	Thr	Pro	Leu
145					150					155					160
Gln	Phe	Ile	Asn	Ile	Asn	Tyr	Val	Pro	Leu	Lys	Phe	Arg	Val	Leu	Phe
			165						170						175
Ala	Asn	Leu	Ala	Ala	Leu	Phe	Trp	Tyr	Ala	Tyr	Leu	Ala	Ser	Leu	Gly
			180					185						190	

Lys

<210> 5733

<211> 950

<212> DNA

<213> Homo sapiens

<400> 5733

nnccacgtcg tcattctccc cggggacggt gggagtggca cggccgcat cagcttcaca
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ggggccttga aaattccagg cgtgatagag ttctcactgt gtctgctgtt tgccaagctg
120

gtcagctata ctttcctctt ctggctgccc ctgtacatca cgaatgtgga tcaccttgat
180
gccaaaaagg cggggtgcac aggtagcccc gaccctctca ggcattccag ccacagaaca
240
tcaaagtgag cgagtactgc gctggctgtg gcttcagaga acctgtatgt gccacgtgga
300
aaaacaggac accagagccc accagacagt gccggccagc agagaagcag agagccagcg
360
ccacacaaca tcaagaaggc cgacaaccag gttggaaacc aagacggagc tcagaccac
420
cacatcgccc cagaggtttt tccagcacc atgatgttcc ggactgacct aaaaactaat
480
tgtcgagaag ccaaggggtga ggaggcagga agcacctccg gttggaggca cccaggcttg
540
ccagccacag agcgccccga agtcaccgtc atcccagccc ctggccttcc tgccgcctc
600
cggggccatg gcgctgctgt tcagctcagg cacaggggca cagcagaggt ttgggaagcg
660
gtctccccac cggcactggg attggcgggt ccaagcccag caaccggctt cgctccacaa
720
cacacaccac acctgggact gtttttaata catagcaaca gactgggtta tttatttaag
780
atgtgtattg tgtcatatga agtttaagag acataaatgg cattttgtta tttattaaga
840
caaactccaa ttgttctctg gctgtttttt tcagttgtgt ctagcaaat acttatctgc
900
cctttgaaat aaaatgtttt tgtttaaaaa atctcaaaaa aaaaaaaaaa
950

<210> 5734
<211> 82
<212> PRT
<213> Homo sapiens

<400> 5734
Xaa His Val Val Ile Leu Pro Gly Asp Gly Gly Ser Gly Thr Ala Ala
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Ile Ser Phe Thr Gly Ala Leu Lys Ile Pro Gly Val Ile Glu Phe Ser
20 25 30
Leu Cys Leu Leu Phe Ala Lys Leu Val Ser Tyr Thr Phe Leu Phe Trp
35 40 45
Leu Pro Leu Tyr Ile Thr Asn Val Asp His Leu Asp Ala Lys Lys Ala
50 55 60
Gly Cys Thr Gly Ser Pro Asp Pro Leu Arg His Ser Ser His Arg Thr
65 70 75 80
Ser Lys

<210> 5735
<211> 4241
<212> DNA
<213> Homo sapiens

<400> 5735

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<210> 5736

<211> 327

<212> PRT

<213> Homo sapiens

<400> 5736

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Thr	Val	Arg	Gly	Glu	Arg	Ser	Tyr	Ser	Trp	Gly	Met	Ala	Val	Asn	Val
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Tyr	Ser	Thr	Ser	Ile	Thr	Gln	Glu	Thr	Met	Ser	Arg	His	Asp	Ile	Ile
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Ala	Trp	Val	Asn	Asp	Ile	Val	Ser	Leu	Asn	Tyr	Thr	Lys	Val	Glu	Gln
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Leu	Cys	Ser	Gly	Ala	Ala	Tyr	Cys	Gln	Phe	Met	Asp	Met	Leu	Phe	Pro
			85					90					95		
Gly	Cys	Ile	Ser	Leu	Lys	Lys	Val	Lys	Phe	Gln	Ala	Lys	Leu	Glu	His

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Glu Tyr Ile His Asn Phe Lys Leu Leu Gln Ala Ser Phe Lys Arg Met
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130 135 140
Gln Asp Asn Leu Asp Phe Ile Gln Trp Phe Lys Lys Phe Tyr Asp Ala
145 150 155 160
Asn Tyr Asp Gly Lys Glu Tyr Asp Pro Val Glu Ala Arg Gln Gly Gln
165 170 175
Asp Ala Ile Pro Pro Pro Asp Pro Gly Glu Gln Ile Phe Asn Leu Pro
180 185 190
Lys Lys Ser His His Ala Asn Ser Pro Thr Ala Gly Ala Ala Lys Ser
195 200 205
Ser Pro Ala Ala Lys Pro Gly Ser Thr Pro Ser Arg Pro Ser Ser Ala
210 215 220
Lys Arg Ala Ser Ser Ser Gly Ser Ala Ser Lys Ser Asp Lys Asp Leu
225 230 235 240
Glu Thr Gln Val Ile Gln Leu Asn Glu Gln Val His Ser Leu Lys Leu
245 250 255
Ala Leu Glu Gly Val Glu Lys Glu Arg Asp Phe Tyr Phe Gly Lys Leu
260 265 270
Arg Glu Ile Glu Leu Leu Cys Gln Glu His Gly Gln Glu Asn Asp Asp
275 280 285
Leu Val Gln Arg Leu Met Asp Ile Leu Tyr Ala Ser Glu Glu His Glu
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<211> 340
<212> DNA
<213> Homo sapiens

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<210> 5738
<211> 99
<212> PRT
<213> Homo sapiens

<400> 5738

Met Leu Pro Pro Trp Pro Ile Ser Ser His Gln Val Arg Met Ala Leu
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Gln His Leu Pro Leu Arg Leu Gln Leu Pro Ser Gln Val His Gln Glu
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Thr Thr Gly His His Trp Gln Trp Arg Gly Asp Met Glu His Gly Leu
35 40 45
Gly Ser Arg Leu Leu Ala Pro Asp Val Gln Pro Gln Thr Pro Pro Val
50 55 60
Met Gly Glu Val Trp Arg Pro Val Gln Leu Ser Gln Gly His Ala His
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Leu Ser Leu Gly Ser Val Gly Lys Ala Tyr Pro Lys Ser His Ile Gln
85 90 95
Gly Gly Xaa

<210> 5739

<211> 780

<212> DNA

<213> Homo sapiens

<400> 5739

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<210> 5740

<211> 120

<212> PRT

<213> Homo sapiens

<400> 5740

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35 40 45
Leu Leu Pro Pro Ala Gly Lys Gln Leu Gly His His Leu Ser Glu Ser
50 55 60
Arg Cys Cys Ser Ser Trp Gln Gln Ser His Ser Glu Arg Ser Cys Val
65 70 75 80
His Cys Leu Ser Gly Arg Pro Cys Gln Ser Pro Ser Leu Pro Pro Pro
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Phe Leu Gly Arg Ala Gln Pro Gln
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<210> 5741

<211> 2444

<212> DNA

<213> Homo sapiens

<400> 5741

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<210> 5742

<211> 427
<212> PRT
<213> Homo sapiens

<400> 5742

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35 40 45
Ile Glu Ala Met Asp Pro Ala Thr Val Glu Gln Gln Glu His Trp Phe
50 55 60
Glu Lys Ala Leu Arg Asp Lys Lys Gly Phe Ile Ile Lys Gln Met Lys
65 70 75 80
Glu Asp Gly Ala Cys Leu Phe Arg Ala Val Ala Asp Gln Val Tyr Gly
85 90 95
Asp Gln Asp Met His Glu Val Val Arg Lys His Cys Met Asp Tyr Leu
100 105 110
Met Lys Asn Ala Asp Tyr Phe Ser Asn Tyr Val Thr Glu Asp Phe Thr
115 120 125
Thr Tyr Ile Asn Arg Lys Arg Lys Asn Asn Cys His Gly Asn His Ile
130 135 140
Glu Met Gln Ala Met Ala Glu Met Tyr Asn Arg Pro Val Glu Val Tyr
145 150 155 160
Gln Tyr Ser Thr Glu Pro Ile Asn Thr Phe His Gly Ile His Gln Asn
165 170 175
Glu Asp Glu Pro Ile Arg Val Ser Tyr His Arg Asn Ile His Tyr Asn
180 185 190
Ser Val Val Asn Pro Asn Lys Ala Thr Ile Gly Val Gly Leu Gly Leu
195 200 205
Pro Ser Phe Lys Pro Gly Phe Ala Glu Gln Ser Leu Met Lys Asn Ala
210 215 220
Ile Lys Thr Ser Glu Glu Ser Trp Ile Glu Gln Gln Met Leu Glu Asp
225 230 235 240
Lys Lys Arg Ala Thr Asp Trp Glu Ala Thr Asn Glu Ala Ile Glu Glu
245 250 255
Gln Val Ala Arg Glu Ser Tyr Leu Gln Trp Leu Arg Asp Gln Glu Lys
260 265 270
Gln Ala Arg Gln Val Arg Gly Pro Ser Gln Pro Arg Lys Ala Ser Ala
275 280 285
Thr Cys Ser Ser Ala Thr Ala Ala Ala Ser Ser Gly Leu Glu Glu Trp
290 295 300
Thr Ser Arg Ser Pro Arg Gln Arg Ser Ser Ala Ser Ser Pro Glu His
305 310 315 320
Pro Glu Leu His Ala Glu Leu Gly Met Lys Pro Pro Ser Pro Gly Thr
325 330 335
Val Leu Ala Leu Ala Lys Pro Pro Ser Pro Cys Ala Pro Gly Thr Ser
340 345 350
Ser Gln Phe Ser Ala Gly Ala Asp Arg Ala Thr Ser Pro Leu Val Ser
355 360 365
Leu Tyr Pro Ala Leu Glu Cys Arg Ala Leu Ile Gln Gln Met Ser Pro
370 375 380
Ser Ala Phe Gly Leu Asn Asp Trp Asp Asp Asp Glu Ile Leu Ala Ser

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 Lys Val His Arg Asp Pro Pro Pro Asp Lys Ser
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<210> 5743
 <211> 550
 <212> DNA
 <213> Homo sapiens

<400> 5743
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<210> 5744
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 5744
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 Cys Lys Gly Ala Arg Arg Pro Gly Cys Pro Thr Pro Glu Thr Gly Gln
 35 40 45
 Gly Gly Arg Pro Pro Lys Gly Pro Arg Thr Gly Arg Pro Ala Pro Ser
 50 55 60
 Pro Gly Ser Pro Pro Arg Glu Ser Arg Cys Leu Ala Pro Xaa Asp Pro
 65 70 75 80
 Leu Gly Trp Thr Pro Gly Pro Pro Ala Ala Ala Pro Gly Ala Leu
 85 90 95

<210> 5745
 <211> 849

<212> DNA

<213> Homo sapiens

<400> 5745

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<210> 5746

<211> 140

<212> PRT

<213> Homo sapiens

<400> 5746

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Val Thr Gln Lys Leu Met Leu Arg Lys Ala Ser Leu Gly Pro Leu Pro
35 40 45
Arg Ala Ser Glu Arg Pro Gly Val Pro Val Phe Leu Glu Met Gly Pro
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<211> 1999

<212> DNA

<213> Homo sapiens

<400> 5747

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<212> PRT

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 5754

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<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

<400> 5761

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 Gly Leu Val Ser Arg Leu Gln Pro Lys Gln Pro Leu Arg Leu Gln Phe

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Gly Arg Ala Pro Thr Leu	Pro Gly Ser Ala Ala	Thr Leu Gln Leu Asp
785	790	795
Gly Leu Ala Arg Ala Pro	Gly Gln Pro Lys Ile Asp	His Leu Arg Arg
	805	810
Leu His Leu Gly Ala Cys	Pro Thr Glu Glu Cys Lys	Ala Cys Thr Arg
	820	825
Cys Gly Cys Val Thr Met	Leu Lys Ser Pro Asn Arg	Thr Thr Ala Val
	835	840
Lys Gln Trp Glu Gln Arg	Trp Ile Lys Asn Cys Leu	Cys Gly Gly Leu
	850	855
Trp Trp Arg Val Pro Leu	Ser Tyr Pro	
865	870	

<210> 5767
 <211> 1910
 <212> DNA
 <213> Homo sapiens

<400> 5767
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 ttacatggg caagacgata tcctctctgt gagaccacaca agtttggtt gagttactcc
 120
 tcagtatcgt gggttttgct gctattctga agggatcccc catcacgctg gcagctgtgt
 180
 gccaggagag accctgaggg ctgcctcacc acagcaggaa cgcccttctc agtcccagcc
 240
 caatcctctc tcacactgcg gtgctctgtc cctatggaaa cagcctctgt atgtgtgtgt
 300
 gtgtgtgtgt gtgtgtgtgt gtgtgaataa tatatggaat aaagtttgag attccctgct
 360
 ttttcatggt accttagcct caattttaaa cttacattgt ttgttaaaat tatcaaattg
 420
 acaacctcat tgctatggaa caaaaaagac tgtgaggaaa aagaatcata acttgga
 480
 aaataagtga aaaggcattg agagattgct aagatttgtt aagttaaaac aataatatat
 540
 ctagaaaaga ctgtgaaaat atatatctca aaagagaaca aggcatagtc agaaggctca
 600
 gtaaaacaat tacttttaaaa gctgactaat aaaaagggtg agtgaaagaa ctcttccatc
 660
 cttgaccctt cctcacttcc tccctccgac tctaccagtc tggatgcact aaagcagaat
 720
 aacctaagag ccatgaaaaa gtgctggtat ttttcaggat ctcttcaaga caccttccgt
 780
 cttggtaacc tgaattctct ctctgatcaa ggcagctgat ggactttcaa tgtatttgga
 840
 gatgccggtt caaaaacgtc atcatcatct tctgctcctt cttctatcgg tttcatcttg
 900
 gcagaggctc gctggtgtgg ggatgacaca tgaagagagg acatgctgga ggtactccga
 960
 agaaactggt gcaagccgtc gtcactgtca ctggagctgg ctatactgtt cctcatttcc
 1020

aacatggaga tctgtgtgca gaggetgagc tgatgttcca gctttttggc tttcttatca
 1080
 ttttaaggtgg gatcattcaa tgagtagagc ttatttgtga tgtcttttcc aataagatac
 1140
 ctaaagattt catacaagaa aggttctgat tccagaaagt atgttaatct ttctcttgac
 1200
 cagcataaaa atctgcagtt atcatctgca ataatggtga cctggaattt ttcaccttg
 1260
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 1320
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 1380
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 1500
 cgccggtaca tgccactgag ttcccttttca atctttaccg gtctcttctt gtataaaaga
 1560
 tacgacagat gcaaaatggt gacaccaag aacacagagt tccagatcat tatatccaag
 1620
 gcacatcggg agagagtggc ccagacgata taaagggtag atcctagagt taacattccc
 1680
 ctaagaaata tcatatgaag gtgaagagta gttggaataa ccaaccaac tgcaaaacaa
 1740
 atatttgcta catgaaaaac cagatgatgt atctctctcc agttttcaca agtggcttta
 1800
 ttggaaggca caggtatgat actttctaac tcaggtgtaa aacctatggc agttgattct
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<210> 5768

<211> 360

<212> PRT

<213> Homo sapiens

<400> 5768

Met Asn Tyr Thr Glu Ser Ser Pro Leu Arg Glu Ser Thr Ala Ile Gly
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 Phe Thr Pro Glu Leu Glu Ser Ile Ile Pro Val Pro Ser Asn Lys Thr
 20 25 30
 Thr Cys Glu Asn Trp Arg Glu Ile His His Leu Val Phe His Val Ala
 35 40 45
 Asn Ile Cys Phe Ala Val Gly Leu Val Ile Pro Thr Thr Leu His Leu
 50 55 60
 His Met Ile Phe Leu Arg Gly Met Leu Thr Leu Gly Cys Thr Leu Tyr
 65 70 75 80
 Ile Val Trp Ala Thr Leu Tyr Arg Cys Ala Leu Asp Ile Met Ile Trp
 85 90 95
 Asn Ser Val Phe Leu Gly Val Asn Ile Leu His Leu Ser Tyr Leu Leu
 100 105 110
 Tyr Lys Lys Arg Pro Val Lys Ile Glu Lys Glu Leu Ser Gly Met Tyr
 115 120 125
 Arg Arg Leu Phe Glu Pro Leu Arg Val Pro Pro Asp Leu Phe Arg Arg

130	135	140
Leu Thr Gly Gln Phe Cys Met Ile Gln Thr Leu Lys Lys Gly Gln Thr		
145	150	155
Tyr Ala Ala Glu Asp Lys Thr Ser Val Asp Asp Arg Leu Ser Ile Leu		160
	165	170
Leu Lys Gly Lys Met Lys Val Ser Tyr Arg Gly His Phe Leu His Asn		175
	180	185
Ile Tyr Pro Cys Ala Phe Ile Asp Ser Pro Glu Phe Arg Ser Thr Gln		190
	195	200
Met His Lys Gly Glu Lys Phe Gln Val Thr Ile Ile Ala Asp Asp Asn		205
	210	215
Cys Arg Phe Leu Cys Trp Ser Arg Glu Arg Leu Thr Tyr Phe Leu Glu		220
225	230	235
Ser Glu Pro Phe Leu Tyr Glu Ile Phe Arg Tyr Leu Ile Gly Lys Asp		240
	245	250
Ile Thr Asn Lys Leu Tyr Ser Leu Asn Asp Pro Thr Leu Asn Asp Lys		255
	260	265
Lys Ala Lys Lys Leu Glu His Gln Leu Ser Leu Cys Thr Gln Ile Ser		270
	275	280
Met Leu Glu Met Arg Asn Ser Ile Ala Ser Ser Ser Asp Ser Asp Asp		285
	290	295
Gly Leu His Gln Phe Leu Arg Ser Thr Ser Ser Met Ser Ser Leu His		300
305	310	315
Val Ser Ser Pro His Gln Arg Ala Ser Ala Lys Met Lys Pro Ile Glu		320
	325	330
Glu Gly Ala Glu Asp Asp Asp Asp Val Phe Glu Pro Ala Ser Pro Asn		335
	340	345
Thr Leu Lys Val His Gln Leu Pro		350
	355	360

<210> 5769
<211> 427
<212> DNA
<213> Homo sapiens

<400> 5769
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120
ctgcagacac agctgaagga agtattaaga gaaaatgata tcttgcgga ggaatgtgga
180
gtaaaggaga gcaaattgag ttcttcaatg aatagcatca agatcttctg gggcccagag
240
ctgaagaagg aacgagccct gagaaaggat gaagcttcca aaatcccat ttggaaggaa
300
cagtacagag ttgtacaaga ggaaaaccag gtaagttcta cgtgtgttta cctttattgg
360
ctgaattcat gtatataaat gaaatagcct tttttttccc ctttcctaga tttttccctt
420
cacgcgt
427

<210> 5770

<211> 85
<212> PRT
<213> Homo sapiens

<400> 5770
Leu Gln Thr Gln Leu Lys Glu Val Leu Arg Glu Asn Asp Leu Leu Arg
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Lys Asp Val Glu Val Lys Glu Ser Lys Leu Ser Ser Ser Met Asn Ser
20 25 30
Ile Lys Ile Phe Trp Gly Pro Glu Leu Lys Lys Glu Arg Ala Leu Arg
35 40 45
Lys Asp Glu Ala Ser Lys Ile Pro Ile Trp Lys Glu Gln Tyr Arg Val
50 55 60
Val Gln Glu Glu Asn Gln Val Ser Ser Thr Cys Val Tyr Leu Tyr Trp
65 70 75 80
Leu Asn Ser Cys Ile
85

<210> 5771
<211> 2539
<212> DNA
<213> Homo sapiens

<400> 5771
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aggagtctggg tttgtcttgc caatggaagt tggagtggag ccactcccga ctgtgtgcct
120
gtcagatgtg ccaccccgcc acaactggcc aatgggggtga cggaaggcct ggactatggc
180
ttcatgaagg aagtaacatt ccactgtcat gggctacatc ttgcacggtg ctccaaaact
240
cacctgtcag tcagaggcaa ctgggatgca gagattcctc tctgtaaacc agtcaactgt
300
ggacctcctg aagatcttgc ccatggtttc cctaattggtt tttcctttat tcatgggggc
360
catatacagt atcagtgttt tcctggttat aagctccatg gaaattcatc aagaagggtc
420
ctctccaatg gctcctggag tggcagctca ccttccctgcc tgccttgagc atgttccaca
480
ccagtaattg aatatggaac tgtcaatggg acagattttg actgtggaaa ggcagcccgg
540
attcagtgtc tcaaaggctt caagctccta ggactttctg aaatcacctg tgaagccgat
600
ggccagtgga gctctgggtt cccccactgt gaacacaatt cttgtgggtc tcttccaatg
660
ataccaaatg cgttcatcag tgagaccagc tcttgggaagg aaaatgtgat aacttacagc
720
tgcaggtctg gatatgtcat acaaggcagt tcagatctga tttgtacaga gaaaggggta
780
tggaaccagc cttatccagt ctgtgagccc ttgtcctgtg ggtccccacc gtctgtcgcc
840
aatgcagtgg caactggaga ggcacacacc tatgaaagtg aagtgaact cagatgtctg
900

gaaggttata cgatggatac agatacagat acaatcacct gtcagaaaga tggtcgctgg
960
ttccctgaga gaatctcctg cagtcctaaa aaatgtcctc tcccggaaaa cataacacat
1020
atacttgtag atggggacga tttcagtggtg aataggcaag tttctgtgtc atgtgcagaa
1080
gggtatacct ttgagggagt taacatatca gtatgtcagc ttgatggaac ctgggagcca
1140
ccattctccg atgaatcttg cagtccagtt tcttgtggga aacctgaaag tccagaacat
1200
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1260
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1320
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1380
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1440
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1500
cctctctgca aaccaaatcc atgccctgtt ccttttgtga tccccgagaa tgctctgctg
1560
tctgaaaagg agttttatgt tgatcagaat gtgtccatca aatgtaggga aggttttctg
1620
ctgcagggcc acggcatcat tacctgcaac cccgacgaga cgtggacaca gacaagcgcc
1680
aaatgtgaaa aaatctcatg tggccacca gctcacgtag aaaatgcaat tgctcgaggc
1740
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1800
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1860
gctgtctgtc gatttccatg tcagaatggg ggcatctgc caacgccccaa atgcttgttc
1920
ctgtccagag ggctggatgg ggcgcctctg tgaagaacca atctgcatc tccctgtct
1980
gaacggaggt cgctgtgtgg ccccttacca gtgtgactgc ccgcctggct ggacggggtc
2040
tcgctgtcat acagctgttt gccagtctcc ctgcttaa at ggtggaaaat gtgtaagacc
2100
aaaccgatgt cactgtcttt cttcttggac gggacataac tgttccagga aaaggaggac
2160
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2220
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2280
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2400
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2520

tgctactaaa taaaaaaaaa
2539

<210> 5772

<211> 642

<212> PRT

<213> Homo sapiens

<400> 5772

Tyr	Thr	Cys	Asn	Glu	Gly	Phe	Leu	Leu	Glu	Gly	Ala	Arg	Ser	Arg	Val
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Cys	Leu	Ala	Asn	Gly	Ser	Trp	Ser	Gly	Ala	Thr	Pro	Asp	Cys	Val	Pro
			20					25					30		
Val	Arg	Cys	Ala	Thr	Pro	Pro	Gln	Leu	Ala	Asn	Gly	Val	Thr	Glu	Gly
			35				40					45			
Leu	Asp	Tyr	Gly	Phe	Met	Lys	Glu	Val	Thr	Phe	His	Cys	His	Gly	Leu
	50					55					60				
His	Leu	Ala	Arg	Cys	Ser	Lys	Thr	His	Leu	Ser	Val	Arg	Gly	Asn	Trp
65					70					75				80	
Asp	Ala	Glu	Ile	Pro	Leu	Cys	Lys	Pro	Val	Asn	Cys	Gly	Pro	Pro	Glu
				85				90						95	
Asp	Leu	Ala	His	Gly	Phe	Pro	Asn	Gly	Phe	Ser	Phe	Ile	His	Gly	Gly
			100					105					110		
His	Ile	Gln	Tyr	Gln	Cys	Phe	Pro	Gly	Tyr	Lys	Leu	His	Gly	Asn	Ser
			115				120						125		
Ser	Arg	Arg	Cys	Leu	Ser	Asn	Gly	Ser	Trp	Ser	Gly	Ser	Ser	Pro	Ser
	130					135					140				
Cys	Leu	Pro	Cys	Arg	Cys	Ser	Thr	Pro	Val	Ile	Glu	Tyr	Gly	Thr	Val
145					150					155					160
Asn	Gly	Thr	Asp	Phe	Asp	Cys	Gly	Lys	Ala	Ala	Arg	Ile	Gln	Cys	Phe
				165				170						175	
Lys	Gly	Phe	Lys	Leu	Leu	Gly	Leu	Ser	Glu	Ile	Thr	Cys	Glu	Ala	Asp
			180				185						190		
Gly	Gln	Trp	Ser	Ser	Gly	Phe	Pro	His	Cys	Glu	His	Thr	Ser	Cys	Gly
			195				200					205			
Ser	Leu	Pro	Met	Ile	Pro	Asn	Ala	Phe	Ile	Ser	Glu	Thr	Ser	Ser	Trp
	210					215					220				
Lys	Glu	Asn	Val	Ile	Thr	Tyr	Ser	Cys	Arg	Ser	Gly	Tyr	Val	Ile	Gln
225					230					235					240
Gly	Ser	Ser	Asp	Leu	Ile	Cys	Thr	Glu	Lys	Gly	Val	Trp	Asn	Gln	Pro
				245					250					255	
Tyr	Pro	Val	Cys	Glu	Pro	Leu	Ser	Cys	Gly	Ser	Pro	Pro	Ser	Val	Ala
			260					265					270		
Asn	Ala	Val	Ala	Thr	Gly	Glu	Ala	His	Thr	Tyr	Glu	Ser	Glu	Val	Lys
			275				280						285		
Leu	Arg	Cys	Leu	Glu	Gly	Tyr	Thr	Met	Asp	Thr	Asp	Thr	Asp	Thr	Ile
	290					295					300				
Thr	Cys	Gln	Lys	Asp	Gly	Arg	Trp	Phe	Pro	Glu	Arg	Ile	Ser	Cys	Ser
305					310					315					320
Pro	Lys	Lys	Cys	Pro	Leu	Pro	Glu	Asn	Ile	Thr	His	Ile	Leu	Val	His
				325					330					335	
Gly	Asp	Asp	Phe	Ser	Val	Asn	Arg	Gln	Val	Ser	Val	Ser	Cys	Ala	Glu
			340				345						350		
Gly	Tyr	Thr	Phe	Glu	Gly	Val	Asn	Ile	Ser	Val	Cys	Gln	Leu	Asp	Gly

355	360	365
Thr Trp Glu Pro Pro Phe Ser Asp Glu Ser Cys Ser Pro Val Ser Cys		
370	375	380
Gly Lys Pro Glu Ser Pro Glu His Gly Phe Val Val Gly Ser Lys Tyr		
385	390	395
Thr Phe Glu Ser Thr Ile Ile Tyr Gln Cys Glu Pro Gly Tyr Glu Leu		
405	410	415
Glu Gly Asn Arg Glu Arg Val Cys Gln Glu Asn Arg Gln Trp Ser Gly		
420	425	430
Gly Val Ala Ile Cys Lys Glu Thr Arg Cys Glu Thr Pro Leu Glu Phe		
435	440	445
Leu Asn Gly Lys Ala Asp Ile Glu Asn Arg Thr Thr Gly Pro Asn Val		
450	455	460
Val Tyr Ser Cys Asn Arg Gly Tyr Ser Leu Glu Gly Pro Ser Glu Ala		
465	470	475
His Cys Thr Glu Asn Gly Thr Trp Ser His Pro Val Pro Leu Cys Lys		
485	490	495
Pro Asn Pro Cys Pro Val Pro Phe Val Ile Pro Glu Asn Ala Leu Leu		
500	505	510
Ser Glu Lys Glu Phe Tyr Val Asp Gln Asn Val Ser Ile Lys Cys Arg		
515	520	525
Glu Gly Phe Leu Leu Gln Gly His Gly Ile Ile Thr Cys Asn Pro Asp		
530	535	540
Glu Thr Trp Thr Gln Thr Ser Ala Lys Cys Glu Lys Ile Ser Cys Gly		
545	550	555
Pro Pro Ala His Val Glu Asn Ala Ile Ala Arg Gly Val His Tyr Gln		
565	570	575
Tyr Gly Asp Met Ile Thr Tyr Ser Cys Tyr Ser Gly Tyr Met Leu Glu		
580	585	590
Gly Phe Leu Arg Ser Val Cys Leu Glu Asn Gly Thr Trp Thr Ser Pro		
595	600	605
Pro Ile Cys Arg Ala Val Cys Arg Phe Pro Cys Gln Asn Gly Gly His		
610	615	620
Leu Pro Thr Pro Lys Cys Leu Phe Leu Ser Arg Gly Leu Asp Gly Ala		
625	630	635
Pro Leu		640

<210> 5773
 <211> 579
 <212> DNA
 <213> Homo sapiens

<400> 5773
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 120
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 180
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 240
 gtgtcccggc gcgagcggga ccgggagcgc cctcgtcccc gcccgaccgc atcgacatct
 300

tcgggcgac ggtgagcaag cgcagcagcc tggacgagaa gcagaagcga gaggaggagg
360
agaagaaagc ggagttcgag cggcagcgaa aaattcgaca gcaagaaata gaagaaaaac
420
tcatcgagga agaaacagca cgaagagtag aagaattggt agcaanaaag ggtggaggaa
480
gaactggaga aaaggaagga tgaaattgaa cgagaagttc tccgaagggt ggaggaagcc
540
aaacgcacga tggaaaagca gttgctcgaa gaactcgag
579

<210> 5774
<211> 104
<212> PRT
<213> Homo sapiens

<400> 5774
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Met Gly Arg Ser Arg Ser Arg Ser Ser Arg Ser Lys His Thr Lys
20 25 30
Ser Ser Lys His Asn Lys Lys Arg Ser Arg Ser Arg Ser Arg Ser Arg
35 40 45
Asp Lys Glu Arg Val Arg Lys Arg Ser Lys Ser Arg Glu Ser Lys Arg
50 55 60
Asn Arg Arg Arg Glu Ser Arg Ser Arg Ser Arg Ser Thr Asn Thr Ala
65 70 75 80
Val Ser Arg Arg Glu Arg Asp Arg Glu Arg Pro Arg Pro Arg Pro Thr
85 90 95
Ala Ser Thr Ser Ser Gly Ala Arg
100

<210> 5775
<211> 1441
<212> DNA
<213> Homo sapiens

<400> 5775
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120
caccggggac acctggaacc cagcaccacg agcctcagct tcacctccat gggcatcaac
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240
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420
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480

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720
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780
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1140
caccggcacg agaagatcca caccaccggg cccaaggccc tggccatgct gatgctgggg
1200
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1320
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1440
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1441

<210> 5776

<211> 359

<212> PRT

<213> Homo sapiens

<400> 5776

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Leu	Gln	Asp	Val	Glu	Glu	Val	Glu	Ile	Gly	Arg	Asp	Thr	Phe	Trp	Pro
			20					25					30		
Asp	Ser	Glu	Pro	Lys	Pro	Glu	Gln	Ala	Pro	Arg	Ser	Pro	Gly	Ser	Gln
		35					40					45			
Ala	Pro	Asp	Glu	Gly	Ala	Gly	Gly	Ala	Leu	Arg	Thr	Ser	Val	Arg	Ser
	50					55				60					
Leu	Pro	Arg	Arg	Ala	Arg	Cys	Ser	Ala	Gly	Phe	Gly	Pro	Glu	Ser	Ser
65					70					75				80	
Ala	Glu	Arg	Pro	Ala	Gly	Gln	Pro	Pro	Gly	Ala	Val	Pro	Cys	Ala	Gln
				85					90					95	
Pro	Arg	Gly	Ala	Trp	Arg	Val	Thr	Leu	Val	Gln	Gln	Ala	Ala	Ala	Gly

100 105 110
Pro Glu Gly Ala Pro Glu Arg Ala Ala Glu Leu Gly Val Asn Phe Gly
115 120 125
Arg Ser Arg Gln Gly Ser Ala Arg Gly Thr Lys Pro His Arg Cys Glu
130 135 140
Ala Cys Gly Lys Ser Phe Lys Tyr Asn Ser Leu Leu Leu Lys His Gln
145 150 155 160
Arg Ile His Thr Gly Glu Lys Pro Tyr Ala Cys His Glu Cys Gly Lys
165 170 175
Cys Phe Ala Ala Ala Ser Arg Phe Ile Gln His Gln Arg Ile His Ser
180 185 190
Gly Glu Lys Pro Tyr Ala Cys Pro Glu Cys Ser Lys Thr Phe Thr Arg
195 200 205
Ser Ser Asn Leu Ile Lys His Gln Val Ile His Ser Gly Glu Arg Pro
210 215 220
Phe Ala Cys Gly Asp Cys Gly Lys Leu Phe Arg Arg Ser Phe Ala Leu
225 230 235 240
Leu Glu His Ala Arg Val His Ser Gly Glu Lys Pro Tyr Glu Cys Ser
245 250 255
Asp Cys Gly Lys Cys Phe Arg Gly Arg Ser His Phe Phe Arg His Asn
260 265 270
Arg Thr His Thr Gly Glu Lys Pro Tyr His Cys Leu Asp Cys Gly Lys
275 280 285
Ser Phe Ser His Ser Ser His Leu Ile Lys His Gln Arg Thr His Arg
290 295 300
Gly Val Arg Pro Tyr Ala Cys Pro Leu Cys Gly Lys Ser Phe Ser Arg
305 310 315 320
Arg Ser Asn Leu His Arg His Glu Lys Ile His Thr Thr Gly Pro Lys
325 330 335
Ala Leu Ala Met Leu Met Leu Gly Ala Ala Ala Ala Gly Ala Leu Ala
340 345 350
Thr Pro Pro Pro Ala Pro Thr
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<210> 5777
<211> 1431
<212> DNA
<213> Homo sapiens

<400> 5777
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tgcgtgcggc ctgcctcaag caaccaggta cgtaggtcgg cggcccagct cggcgctgcg
180
gtgggagccg gagggcgaca gtcagagccg gggtgccagc gggacgagc cgccagatcc
240
acttaggacc ccgtcgttct gcgaagcggc cacgtctgag tcccggggcc tcctcgtgct
300
gcagatgtcg ccttaggacc tcggccagga taccctctgc catgctcttg tgctgcccg
360
gatcaccgac tggcccttgt aagcaccttc gcagcaggaa gccagagct gcgcctgccc
420

tttctgaagg ctgtggaaga gggttgagtg ggcgcattctt agcttgcccc atccccattt
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<210> 5778

<211> 164

<212> PRT

<213> Homo sapiens

<400> 5778

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			20					25				30			
Ala	Gly	Ala	Ala	Leu	Gly	Phe	Leu	Leu	Arg	Arg	Cys	Leu	Gln	Gly	Pro
			35				40				45				
Val	Gly	Asp	His	Gly	Gln	His	Lys	Ser	Met	Ala	Glu	Gly	Ile	Leu	Ala
		50				55				60					
Glu	Val	Leu	Arg	Arg	His	Leu	Gln	His	Glu	Glu	Ala	Pro	Gly	Leu	Arg
65					70				75					80	
Arg	Gly	Arg	Phe	Ala	Glu	Arg	Arg	Gly	Pro	Lys	Trp	Ile	Trp	Arg	Ser
			85					90						95	
Arg	Pro	Ala	Gly	Thr	Pro	Ala	Leu	Thr	Val	Ala	Leu	Arg	Leu	Pro	Pro

100 105 110
Gln Arg Arg Ala Gly Pro Pro Thr Tyr Val Pro Gly Cys Leu Arg Gln
115 120 125
Ala Ala Arg Ser Pro Lys Leu Val Arg Ala Thr Trp Val Thr Ala Ala
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Val Pro Gly Arg Lys Arg Ser Leu Ala Pro Glu Gln Pro Ile Leu Gly
145 150 155 160
Pro Ser Gln Val

<210> 5779
<211> 371
<212> DNA
<213> Homo sapiens

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180
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240
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371

<210> 5780
<211> 123
<212> PRT
<213> Homo sapiens

<400> 5780
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Gln Arg His Gly Arg Glu Arg Gly Val Ile Ser Ala Leu Ser Gly Ile
20 25 30
Pro Cys Val Cys Xaa Arg Val Cys Ala His Gly Asn Val Cys Gly Cys
35 40 45
Val Cys Val His Ala Ala Val Cys Gly Cys Ala Xaa Val Cys Gly Cys
50 55 60
Val Gly Val Cys Gly Cys Val His Gln Cys Arg Cys Ala Trp Val Cys
65 70 75 80
Thr Gly Gly Cys Val Tyr Val Cys Gly Gly Val Pro Ile Cys Ala Gly
85 90 95
Val Trp Val Cys Arg Val Xaa Cys Leu Cys Val Gly Val Xaa Pro Cys
100 105 110
Val Pro Leu Trp Arg Cys Val Gly Val Cys Ser
115 120

<210> 5781
 <211> 845
 <212> DNA
 <213> Homo sapiens

<400> 5781
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 240
 cccgaagcat tgcagccagg agtgacgctg gggggccctg caggccatgg ccaggcccca
 300
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 360
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 420
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 845

<210> 5782
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 5782
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 20 25 30
 Ala Pro Thr Leu Ala Asp Phe Lys Pro Pro Gly Glu Asp Gly Thr Ala
 35 40 45
 Thr Ser Ser Thr Glu Ala Pro Ala Ala Leu Ser Gly Thr Ser Gly Pro
 50 55 60
 Gly Xaa Ser Ser Pro Pro Gly Gly Pro Gly Leu Gly Pro Leu Pro Ala
 65 70 75 80
 Pro Glu Ala Leu Gln Pro Gly Val Gln Arg Gly Gly Pro Ala Gly His

	85		90		95										
Gly	Gln	Ala	Pro	Ala	Pro	Pro	Ala	Pro	Gly	Gln	Ala	Gly	Ser	His	Arg
	100				105					110					
Pro	Gly	Ala	Ala	Pro	Ser	Pro	Arg	Cys	Ser	Ser	Gly	Asn	His	Arg	Ser
	115				120					125					
Ser	Leu	Ala	Val	Ala	Trp	Arg	His	Gly	Thr	Trp	Ile	Gly	Gln	Pro	Pro
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Pro	Cys	Pro													
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<210> 5783

<211> 1839

<212> DNA

<213> Homo sapiens

<400> 5783

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1140

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<210> 5784

<211> 386

<212> PRT

<213> Homo sapiens

<400> 5784

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			20					25					30		
Ile	Lys	Phe	Asp	Ala	Gly	Thr	Leu	Leu	Leu	Ser	Thr	His	Arg	Leu	Ile
		35					40					45			
Trp	Arg	Asp	Gln	Lys	Asn	His	Glu	Cys	Cys	Met	Ala	Ile	Leu	Leu	Ser
	50					55					60				
Gln	Ile	Val	Phe	Ile	Glu	Glu	Gln	Ala	Ala	Gly	Ile	Gly	Lys	Ser	Ala
65					70					75				80	
Lys	Ile	Val	Val	His	Leu	His	Pro	Ala	Pro	Pro	Asn	Lys	Glu	Pro	Gly
				85					90					95	
Pro	Phe	Gln	Ser	Ser	Lys	Asn	Ser	Tyr	Ile	Lys	Leu	Ser	Phe	Lys	Glu
			100					105					110		
His	Gly	Gln	Ile	Glu	Phe	Tyr	Arg	Arg	Leu	Ser	Glu	Glu	Met	Thr	Gln
		115					120					125			
Arg	Arg	Trp	Glu	Asn	Met	Pro	Val	Ser	Gln	Ser	Leu	Gln	Thr	Asn	Arg
	130					135					140				
Gly	Pro	Gln	Pro	Gly	Arg	Ile	Arg	Ala	Val	Gly	Ile	Val	Gly	Ile	Glu
145					150					155				160	
Arg	Lys	Leu	Glu	Glu	Lys	Arg	Lys	Glu	Thr	Asp	Lys	Asn	Ile	Ser	Glu
				165				170					175		
Ala	Phe	Glu	Asp	Leu	Ser	Lys	Leu	Met	Ile	Lys	Ala	Lys	Glu	Met	Val

	180		185		190										
Glu	Leu	Ser	Lys	Ser	Ile	Ala	Asn	Lys	Ile	Lys	Asp	Lys	Gln	Gly	Asp
	195						200					205			
Ile	Thr	Glu	Asp	Glu	Thr	Ile	Arg	Phe	Lys	Ser	Tyr	Leu	Leu	Ser	Met
	210						215					220			
Gly	Ile	Ala	Asn	Pro	Val	Thr	Arg	Glu	Thr	Tyr	Gly	Ser	Gly	Thr	Gln
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Tyr	His	Met	Gln	Leu	Ala	Lys	Gln	Leu	Ala	Gly	Ile	Leu	Gln	Val	Pro
		245						250					255		
Leu	Glu	Glu	Arg	Gly	Gly	Ile	Met	Ser	Leu	Thr	Glu	Val	Tyr	Cys	Leu
		260						265					270		
Val	Asn	Arg	Ala	Arg	Gly	Met	Glu	Leu	Leu	Ser	Pro	Glu	Asp	Leu	Val
	275						280					285			
Asn	Ala	Cys	Lys	Met	Leu	Glu	Ala	Leu	Lys	Leu	Pro	Leu	Arg	Leu	Arg
	290					295					300				
Val	Phe	Asp	Ser	Gly	Val	Met	Val	Ile	Glu	Leu	Gln	Ser	His	Lys	Glu
305					310					315					320
Glu	Glu	Met	Val	Ala	Ser	Ala	Leu	Glu	Thr	Val	Ser	Glu	Lys	Gly	Ser
		325						330					335		
Leu	Thr	Ser	Glu	Glu	Phe	Ala	Lys	Leu	Val	Gly	Met	Ser	Val	Leu	Leu
	340							345					350		
Ala	Lys	Glu	Arg	Leu	Leu	Leu	Ala	Glu	Lys	Met	Gly	His	Leu	Cys	Arg
	355						360					365			
Asp	Asp	Ser	Val	Glu	Gly	Leu	Arg	Phe	Tyr	Pro	Asn	Leu	Phe	Met	Thr
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<210> 5785

<211> 785

<212> DNA

<213> Homo sapiens

<400> 5785

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<210> 5786
<211> 159
<212> PRT
<213> Homo sapiens

<400> 5786
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Arg Ser His Ala Ala Ala Gly Glu Gly Pro Ala Pro Gly Ala Pro Glu
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Lys Pro Ala Ala Arg Ala Ala Asp Leu Ala Ala Pro Ala Gly Ala Ala
35 40 45
Leu Ala Gln Pro Leu Gly Pro Trp Pro Leu Ser Ser Ala Gly Pro Arg
50 55 60
Leu Val Phe Asn Arg Val Asn Arg Arg Arg Asp Pro Ser Lys Ser Pro
65 70 75 80
Ser Leu Gln Gly Thr Gln Glu Thr Tyr Thr Leu Ala His Lys Glu Asn
85 90 95
Val Arg Phe Val Ser Glu Ala Trp Gln Gln Val Gln Gln Gln Leu Asp
100 105 110
Gly Gly Pro Ala Gly Glu Gly Gly Pro Arg Pro Val Gln Tyr Val Glu
115 120 125
Arg Thr Pro Asn Pro Arg Leu Gln Asn Phe Val Pro Ile Asp Leu Asp
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Glu Trp Trp Ala Gln Gln Phe Leu Ala Arg Ile Thr Ser Cys Ser
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<210> 5787
<211> 1683
<212> DNA
<213> Homo sapiens

<400> 5787
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<210> 5788

<211> 417

<212> PRT

<213> Homo sapiens

<400> 5788

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Glu Ile Phe Arg Gln Arg Phe Arg His Leu Arg Tyr Gln Glu Thr Pro
50 55 60
Gly Pro Arg Glu Ala Leu Ser Gln Leu Arg Val Leu Cys Cys Glu Trp
65 70 75 80
Leu Arg Pro Glu Lys His Thr Lys Glu Gln Ile Leu Glu Phe Leu Val
85 90 95
Leu Glu Gln Phe Leu Thr Ile Leu Pro Glu Glu Leu Gln Ser Trp Val
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Arg Gly His His Pro Lys Ser Gly Glu Glu Ala Val Thr Val Leu Glu
115 120 125
Asp Leu Glu Lys Gly Leu Glu Pro Glu Pro Gln Val Pro Gly Pro Ala
130 135 140
His Gly Pro Ala Gln Glu Glu Pro Trp Glu Lys Lys Glu Ser Leu Gly
145 150 155 160
Ala Ala Gln Glu Ala Leu Ser Ile Gln Leu Gln Pro Lys Glu Thr Gln
165 170 175
Pro Phe Pro Lys Ser Glu Gln Val Tyr Leu His Phe Leu Ser Val Val
180 185 190
Thr Glu Asp Gly Pro Glu Pro Lys Asp Lys Gly Ser Leu Pro Gln Pro
195 200 205
Pro Ile Thr Glu Val Glu Ser Gln Val Phe Ser Glu Lys Leu Ala Thr
210 215 220
Asp Thr Ser Thr Phe Glu Ala Thr Ser Glu Gly Thr Leu Glu Leu Gln
225 230 235 240
Gln Arg Asn Pro Lys Ala Glu Arg Leu Arg Trp Ser Pro Ala Gln Glu
245 250 255
Glu Ser Phe Arg Gln Met Val Val Ile His Lys Glu Ile Pro Thr Gly
260 265 270
Lys Lys Asp His Glu Cys Ser Glu Cys Gly Lys Thr Phe Ile Tyr Asn
275 280 285
Ser His Leu Val Val His Gln Arg Val His Ser Gly Glu Lys Pro Tyr
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Lys Cys Ser Asp Cys Gly Lys Thr Phe Lys Gln Ser Ser Asn Leu Gly
305 310 315 320
Gln His Gln Arg Ile His Thr Gly Glu Lys Pro Phe Glu Cys Asn Glu
325 330 335
Cys Gly Lys Ala Phe Arg Trp Gly Ala His Leu Val Gln His Gln Arg
340 345 350
Ile His Ser Gly Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala
355 360 365
Phe Ser Gln Ser Ser Tyr Leu Ser Gln His Arg Arg Ile His Ser Gly
370 375 380
Glu Lys Pro Phe Ile Cys Lys Glu Cys Gly Lys Ala Tyr Gly Trp Cys
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<400> 5798
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 35 40 45
 Ser Gln Arg Asn Tyr Arg Ser Leu Ser Leu Tyr Cys Trp Leu Ala Arg
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 Glu Gly Arg Thr Ser Ser Tyr Gln Gly Asn Gln Gly Ser Leu Arg Pro
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4962

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<211> 535
<212> PRT
<213> Homo sapiens

<400> 5800
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35 40 45
Ile Val Gly Asn Ile Ile Gly Ser Gly Ile Phe Val Ser Pro Lys Gly
50 55 60
Val Leu Glu Asn Ala Gly Ser Val Gly Leu Ala Leu Ile Val Trp Ile
65 70 75 80
Val Thr Gly Phe Ile Thr Val Val Gly Ala Leu Cys Tyr Ala Glu Leu
85 90 95
Gly Val Thr Ile Pro Lys Ser Gly Gly Asp Tyr Ser Tyr Val Lys Asp
100 105 110
Ile Phe Gly Gly Leu Ala Gly Phe Leu Arg Leu Trp Ile Ala Val Leu
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Val Ile Tyr Pro Thr Asn Gln Ala Val Ile Ala Leu Thr Phe Ser Asn
130 135 140
Tyr Val Leu Gln Pro Leu Phe Pro Thr Cys Phe Pro Pro Glu Ser Gly
145 150 155 160
Leu Arg Leu Leu Ala Ala Ile Cys Leu Leu Leu Thr Trp Val Asn
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Cys Ser Ser Val Arg Trp Ala Thr Arg Val Gln Asp Ile Phe Thr Ala
180 185 190
Gly Lys Leu Leu Ala Leu Ala Leu Ile Ile Ile Met Gly Ile Val Gln
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Ile Cys Lys Gly Glu Tyr Phe Trp Leu Glu Pro Lys Asn Ala Phe Glu
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Asn Phe Gln Glu Pro Asp Ile Gly Leu Val Ala Leu Ala Phe Leu Gln
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Gly Ser Phe Ala Tyr Gly Gly Trp Asn Phe Leu Asn Tyr Val Thr Glu
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260 265 270
Ile Pro Leu Val Thr Phe Val Tyr Val Phe Ala Asn Val Ala Tyr Val
275 280 285
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290 295 300
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305 310 315 320
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325 330 335
Ser Ser Arg Leu Phe Phe Ala Gly Ala Arg Glu Gly His Leu Pro Ser
340 345 350
Val Leu Ala Met Ile His Val Lys Arg Cys Thr Pro Ile Pro Ala Leu
355 360 365
Leu Phe Thr Cys Ile Ser Thr Leu Leu Met Leu Val Thr Ser Asp Met
370 375 380
Tyr Thr Leu Ile Asn Tyr Val Gly Phe Ile Asn Tyr Leu Phe Tyr Gly
385 390 395 400
Val Thr Val Ala Gly Gln Ile Val Leu Arg Trp Lys Lys Pro Asp Ile
405 410 415
Pro Arg Pro Ile Lys Ile Asn Leu Leu Phe Pro Ile Ile Tyr Leu Leu
420 425 430
Phe Trp Ala Phe Leu Leu Val Phe Ser Leu Trp Ser Glu Pro Val Val
435 440 445
Cys Gly Ile Gly Leu Ala Ile Met Leu Thr Gly Val Pro Val Tyr Phe

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Glu Leu Leu Thr Leu Val Ser Gln Lys Met Cys Val Val Val Tyr Pro		480
	485	490
Glu Val Glu Arg Gly Ser Gly Thr Glu Glu Ala Asn Glu Asp Met Glu		495
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 <211> 2418
 <212> DNA
 <213> Homo sapiens

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<210> 5802

<211> 350

<212> PRT

<213> Homo sapiens

<400> 5802

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Thr Glu Gly Leu Lys Lys Lys Cys Ala Asp Pro Asp Leu Asn Ala Val
100 105 110
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115 120 125
Ser Ala Leu Asn Asp Val Thr Ala Ala Arg Lys Leu Lys Pro Cys His
130 135 140
Leu Lys Ala Ile Ile Arg Gly Ala Leu Cys His Leu Glu Leu Lys His
145 150 155 160
Phe Ala Glu Ala Val Asn Trp Cys Asp Glu Gly Leu Gln Ile Asp Ala
165 170 175
Lys Glu Lys Lys Leu Leu Glu Met Arg Ala Lys Ala Asp Lys Leu Lys
180 185 190
Arg Ile Glu Gln Arg Asp Val Arg Lys Ala Asn Leu Lys Glu Lys Lys
195 200 205
Glu Arg Asn Gln Asn Glu Ala Leu Leu Gln Ala Ile Lys Ala Arg Asn
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Ile Arg Leu Ser Glu Ala Ala Cys Glu Asp Glu Asp Ser Ala Ser Glu
225 230 235 240
Gly Leu Gly Glu Leu Phe Leu Asp Gly Leu Ser Thr Glu Asn Pro His
245 250 255
Gly Ala Arg Leu Ser Leu Asp Gly Gln Gly Arg Leu Ser Trp Pro Val
260 265 270
Leu Phe Leu Tyr Pro Glu Tyr Ala Gln Ser Asp Phe Ile Ser Ala Phe
275 280 285
His Glu Asp Ser Arg Phe Ile Asp His Leu Met Val Met Phe Gly Glu
290 295 300
Thr Pro Ser Trp Asp Leu Glu Gln Lys Tyr Cys Leu Ile Ile Trp Arg
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<210> 5803

<211> 692

<212> DNA

<213> Homo sapiens

<400> 5803

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<210> 5804
<211> 126
<212> PRT
<213> Homo sapiens

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Arg Thr Asn Leu Pro Pro Phe Arg Asn Tyr Lys Tyr Asp Ala Leu
50 55 60
Lys Ile Ile His Gln Ala His Lys Ser Lys Thr Asn Glu Leu Val Leu
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Ser Leu Glu Asp Asp Glu Arg Leu Leu Lys Glu Asp Ser Thr Leu
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<210> 5805
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<212> DNA
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<210> 5806

<211> 105

<212> PRT

<213> Homo sapiens

<400> 5806

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Ser	Asp	Phe	Asp	Arg	Cys	Cys	Lys	Leu	Lys	Asp	Arg	Leu	Pro	Ser	Ile
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Val	Val	Glu	Pro	Thr	Glu	Gly	Glu	Val	Glu	Ser	Gly	Glu	Leu	Arg	Trp
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Pro	Pro	Glu	Glu	Phe	Leu	Val	Gln	Glu	Asp	Glu	Gln	Asp	Asn	Cys	Glu
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105

<210> 5807

<211> 1429

<212> DNA

<213> Homo sapiens

<400> 5807

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4971

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1429

<210> 5808
<211> 261
<212> PRT
<213> Homo sapiens

<400> 5808
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Leu Leu Gly Gly Ile Pro Glu Ser Gly Gly Pro Asp Ala Arg Gln Gly
35 40 45
Trp Leu Ala Ala Leu Gln Asp Arg Ser Ile Leu Ala Pro Leu Ala Trp
50 55 60
Asp Leu Gly Leu Leu Leu Leu Phe Val Gly Gln His Ser Leu Met Ala
65 70 75 80
Ala Glu Arg Val Lys Ala Trp Thr Ser Arg Tyr Phe Gly Val Leu Gln
85 90 95
Arg Ser Leu Tyr Val Ala Cys Thr Ala Leu Ala Leu Gln Leu Val Met
100 105 110
Arg Tyr Trp Glu Pro Ile Pro Lys Gly Pro Val Leu Trp Glu Ala Arg
115 120 125
Ala Glu Pro Trp Ala Thr Trp Val Pro Leu Leu Cys Phe Val Leu His
130 135 140
Val Ile Ser Trp Leu Leu Ile Phe Ser Ile Leu Leu Val Phe Asp Tyr
145 150 155 160
Ala Glu Leu Met Gly Leu Lys Gln Val Tyr Tyr His Val Leu Gly Leu
165 170 175
Gly Glu Pro Leu Ala Leu Lys Ser Pro Arg Ala Leu Arg Leu Phe Ser
180 185 190
His Leu Arg His Pro Val Cys Val Glu Leu Leu Thr Val Leu Trp Val
195 200 205
Val Pro Thr Leu Gly Thr Asp Arg Leu Leu Leu Ala Phe Leu Leu Thr
210 215 220
Leu Tyr Leu Gly Leu Ala His Gly Leu Asp Gln Gln Asp Leu Arg Tyr
225 230 235 240
Leu Arg Ala Gln Leu Gln Arg Lys Leu His Leu Leu Ser Arg Pro Gln
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Asp Gly Glu Ala Glu
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<210> 5809
<211> 2009
<212> DNA
<213> Homo sapiens

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2009

<210> 5810
<211> 52
<212> PRT
<213> Homo sapiens

<400> 5810
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Gly Gly Gln Trp Arg Asp Leu Gly Ser Leu Gln Pro Pro Pro Pro Gly
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Phe Lys Gln Phe Ser Cys Leu Ser Leu Leu Ser Ser Trp His Tyr Lys
35 40 45
His Pro Thr Pro
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<210> 5811
<211> 1607
<212> DNA
<213> Homo sapiens

<400> 5811
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<210> 5812
<211> 463
<212> PRT
<213> Homo sapiens

<400> 5812
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35 40 45
Pro Ser Arg Met Gln Met Pro Gln Gly Asn Pro Leu Leu Leu Ser His
50 55 60
Thr Leu Gln Glu Leu Leu Ala Arg Asp Thr Val Gln Val Glu Leu Ile
65 70 75 80
Pro Glu Lys Lys Gly Leu Phe Leu Lys His Val Glu Tyr Glu Val Ser
85 90 95
Ser Gln Arg Phe Lys Ser Ser Val Tyr Arg Arg Tyr Asn Asp Phe Val
100 105 110
Val Phe Gln Glu Met Leu Leu His Lys Phe Pro Tyr Arg Met Val Pro

115	120	125
Ala Leu Pro Pro Lys Arg Met Leu Gly Ala Asp Arg Glu Phe Ile Glu		
130	135	140
Ala Arg Arg Arg Ala Leu Lys Arg Phe Val Asn Leu Val Ala Arg His		
145	150	155
Pro Leu Phe Ser Glu Asp Val Val Leu Lys Leu Phe Leu Ser Phe Ser		160
165	170	175
Gly Ser Asp Val Gln Asn Lys Leu Lys Glu Ser Ala Gln Cys Val Gly		
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Asp Glu Phe Leu Asn Cys Lys Leu Ala Thr Arg Ala Lys Asp Phe Leu		
195	200	205
Pro Ala Asp Ile Gln Ala Gln Phe Ala Ile Ser Arg Glu Leu Ile Arg		
210	215	220
Asn Ile Tyr Asn Ser Phe His Lys Leu Arg Asp Arg Ala Glu Arg Ile		
225	230	235
Ala Ser Arg Ala Ile Asp Asn Ala Ala Asp Leu Leu Ile Phe Gly Lys		240
245	250	255
Glu Leu Ser Ala Ile Gly Ser Asp Thr Thr Pro Leu Pro Ser Trp Ala		
260	265	270
Ala Leu Asn Ser Ser Thr Trp Gly Ser Leu Lys Gln Ala Leu Lys Gly		
275	280	285
Leu Ser Val Glu Phe Ala Leu Leu Ala Asp Lys Ala Ala Gln Gln Gly		
290	295	300
Lys Gln Glu Glu Asn Asp Val Val Glu Lys Leu Asn Leu Phe Leu Asp		
305	310	315
Leu Leu Gln Ser Tyr Lys Asp Leu Cys Glu Arg His Glu Lys Gly Val		320
325	330	335
Leu His Lys His Gln Arg Ala Leu His Lys Tyr Ser Leu Met Lys Arg		
340	345	350
Gln Met Met Ser Ala Thr Ala Gln Asn Arg Glu Pro Glu Ser Val Glu		
355	360	365
Gln Leu Glu Ser Arg Ile Val Glu Gln Glu Asn Ala Ile Gln Thr Met		
370	375	380
Glu Leu Arg Asn Tyr Phe Ser Leu Tyr Cys Leu His Gln Glu Thr Gln		
385	390	395
Leu Ile His Val Tyr Leu Pro Leu Thr Ser His Ile Leu Arg Ala Phe		400
405	410	415
Val Asn Ser Gln Ile Gln Gly His Lys Glu Met Ser Lys Val Trp Asn		
420	425	430
Asp Leu Arg Pro Lys Leu Ser Cys Leu Phe Ala Gly Pro His Ser Thr		
435	440	445
Leu Thr Pro Pro Cys Ser Pro Pro Glu Asp Gly Leu Cys Pro His		
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<210> 5813

<211> 2991

<212> DNA

<213> Homo sapiens

<400> 5813

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<210> 5814

<211> 149

<212> PRT

<213> Homo sapiens

<400> 5814

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Tyr	His	Pro	Asp	Lys	His	Arg	Asp	Pro	Glu	Leu	Lys	Ser	Gln	Ala	Glu
			20					25				30			
Arg	Leu	Phe	Asn	Leu	Val	His	Gln	Ala	Tyr	Glu	Val	Leu	Ser	Asp	Pro

35 40 45
 Gln Thr Arg Ala Ile Tyr Asp Ile Tyr Gly Lys Arg Gly Leu Glu Met
 50 55 60
 Glu Gly Trp Glu Val Val Glu Arg Arg Arg Thr Pro Ala Glu Ile Arg
 65 70 75 80
 Glu Glu Phe Glu Arg Leu Gln Arg Glu Arg Glu Glu Arg Arg Leu Gln
 85 90 95
 Gln Arg Thr Asn Pro Lys Leu Cys Asp Asn Lys Leu Cys Ser Ala Val
 100 105 110
 Phe Ile Pro Trp Asn Pro Thr Arg Pro Asp His Cys Pro Ser Ser Glu
 115 120 125
 Pro Arg Gln Glu His Arg Gly Leu Pro Ala Val Ala Met Gly Tyr Pro
 130 135 140
 Val Ser His Glu His
 145

<210> 5815
 <211> 590
 <212> DNA
 <213> Homo sapiens

<400> 5815
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 480
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 590

<210> 5816
 <211> 196
 <212> PRT
 <213> Homo sapiens

<400> 5816
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 Lys Glu Arg Arg Lys Glu Ile Asp Leu Leu Leu Gly Gln Thr Asp Asp

35 40 45
Thr Arg Tyr His Val Leu Val Asn Leu Gly Leu Pro Ser Leu Phe Ser
50 55 60
Phe Gly Leu Val Asp Asp Ala His His Leu Ile Asn Ala Leu Arg Gln
65 70 75 80
Gln Ser Ile Thr Leu His Leu Val Asp Val Met Pro Val Leu Ile Thr
85 90 95
Leu Ser Ser Leu Gly Ser Ser Phe Leu Leu His Leu Arg Phe Gly Pro
100 105 110
Leu Ser Leu Val Ser His Thr Gly Ala Leu Gln Leu Pro Asn Lys Gly
115 120 125
Gln His Leu Ser Cys Gly Phe Ile Pro Ala Gly Pro Val Asn Glu Arg
130 135 140
Thr Val Ser Leu Glu His Lys Ile Arg Val Arg Leu Val Leu Val Leu
145 150 155 160
Gln Thr Thr Gly Gly Tyr Ile Arg His Gly Arg Gly Cys Ser Glu Ala
165 170 175
Ser Asp His His Ala Ser Ile Pro Gln Ala Ala Asn Gly Arg Arg Ser
180 185 190
Leu Leu Leu Ala
195

<210> 5817
<211> 648
<212> DNA
<213> Homo sapiens

<400> 5817
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<212> PRT

<213> Homo sapiens

<400> 5818

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Met Val Lys Lys Asn Pro Ala Phe Asn Lys Gly Ser Gly Ile Val Thr
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Asn Gly Ser Phe Ser Ser Ser Asn Ala Glu Gly Leu Glu Lys Thr Gln
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Thr Thr Pro Asn Gly Ser Leu Gln Ala Arg Arg Ser Ser Ser Leu Lys
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<213> Homo sapiens

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<211> 274

<212> PRT

<213> Homo sapiens

<400> 5820

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 Glu Glu Ile Pro Val Val Ile Cys Ala Ala Ala Gly Arg Met Gly Ala
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<212> PRT

<213> Homo sapiens

<400> 5822

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Gly Pro Pro His Ser Ala His Ala Leu Pro Arg Glu Ser Cys Thr Ala
180 185 190
His Ala Ala Ser Gln Ala Ala Thr Gln Arg Lys Pro Gly Thr Lys Leu
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Ala Glu Lys Pro Lys Lys Glu Ile Pro Ala Ser Pro Ser Arg Thr Lys
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Gly Lys Arg Ala Ile Pro Val Pro Asn Lys Leu Gly Leu Lys Lys Thr
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<212> DNA

<213> Homo sapiens

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<210> 5825
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<211> 1479

<212> PRT

<213> Homo sapiens

<400> 5830

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His Gly Leu Gln Gly Cys Leu Glu Ala Gln Gly Gly Gln Val Arg Val
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Thr Pro Ala Cys Asn Thr Ser Leu Pro Ala Gln Arg Trp Lys Trp Val
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Gly Trp Pro Gly Thr Asn Thr Thr Ala Ser Leu Gly Met Tyr Glu Cys
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Gln Leu Ser Leu Leu Leu Gly Ala Arg Thr Ser Asn Ile Ser Lys Pro
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Tyr Gly Ser Glu Glu Asp Leu Cys Ala Leu Pro Tyr His Glu Val Tyr
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Gly His Leu Trp Cys Ala Thr Thr Gln Asp Tyr Gly Lys Asp Glu Arg
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Trp Gly Phe Cys Pro Ile Lys Ser Asn Asp Cys Glu Thr Phe Trp Asp
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Lys Asp Gln Leu Thr Asp Ser Cys Tyr Gln Phe Asn Phe Gln Ser Thr
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Arg Ser Trp Gln Glu Ser Lys Lys Ala Cys Leu Arg Gly Gly Gly Asp		400
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Ile Lys Gln Glu Val Glu Glu Leu Trp Ile Gly Leu Asn Asp Leu Lys		430
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Leu Gln Met Asn Phe Glu Trp Ser Asp Gly Ser Leu Val Ser Phe Thr		445
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His Trp His Pro Phe Glu Pro Asn Asn Phe Arg Asp Ser Leu Glu Asp		460
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Cys Val Thr Ile Trp Gly Pro Glu Gly Arg Trp Asn Asp Ser Pro Cys		480
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Ser Pro Ser Cys Tyr Trp Leu Gly Glu Asp Gln Val Thr Tyr Ser Glu		525
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Ala Arg Arg Leu Cys Thr Asp His Gly Ser Gln Leu Val Thr Ile Thr		540
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Asp Gln Pro Gly Tyr Ser Arg Gly Gly Cys Val Ala Leu Ala Thr Gly		605
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Gln Glu Leu Gly Ala Gln Leu Leu Ser Leu Ala Ser Tyr Glu Glu Glu		700
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His Phe Val Ala Asn Met Leu Asn Lys Ile Phe Gly Glu Ser Glu Pro		720
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Glu Ile His Glu Gln His Trp Phe Trp Ile Gly Leu Asn Arg Arg Asp		735
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Pro Arg Gly Gly Gln Ser Trp Arg Trp Ser Asp Gly Val Gly Phe Ser		750
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 His Met Glu Leu Leu Leu Gly His Lys Glu Ala Arg Gln Arg Cys Gln
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 1300 1305 1310
 Phe Val Trp Glu His Leu Gln Ser Tyr Glu Gly Gln Ser Arg Gly Ala
 1315 1320 1325
 Trp Leu Gly Met Asn Phe Asn Pro Lys Gly Gly Thr Leu Val Trp Gln
 1330 1335 1340
 Asp Asn Thr Ala Val Asn Tyr Ser Asn Trp Gly Pro Pro Gly Leu Gly
 1345 1350 1355 1360
 Pro Ser Met Leu Ser His Asn Ser Cys Tyr Trp Ile Gln Ser Asn Ser
 1365 1370 1375
 Gly Leu Trp Arg Pro Gly Ala Cys Thr Asn Ile Thr Met Gly Val Val
 1380 1385 1390
 Cys Lys Leu Pro Arg Ala Glu Gln Ser Ser Phe Ser Pro Ser Ala Leu
 1395 1400 1405
 Pro Glu Asn Pro Ala Ala Leu Val Val Val Leu Met Ala Val Leu Leu
 1410 1415 1420
 Leu Leu Ala Leu Leu Thr Ala Ala Leu Ile Leu Tyr Arg Arg Arg Gln
 1425 1430 1435 1440
 Ser Ile Glu Arg Gly Ala Phe Glu Gly Ala Arg Tyr Ser Arg Ser Ser
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<210> 5831
 <211> 2216
 <212> DNA
 <213> Homo sapiens

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480
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720
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1140
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<210> 5832

<211> 322

<212> PRT

<213> Homo sapiens

<400> 5832

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		20						25					30		
His	Lys	Glu	Phe	Gln	Gln	Asn	Asn	Trp	His	Ala	Val	Gly	Cys	Gly	Phe
		35				40						45			
Arg	Arg	Ala	Arg	Pro	Lys	Phe	Glu	Gln	Val	Asn	Leu	Leu	Asp	Ser	Asn
		50				55						60			
Ala	Val	His	His	Ile	Ile	His	Asp	Phe	Gln	Pro	His	Val	Ile	Val	His
65				70						75				80	
Cys	Ala	Ala	Glu	Arg	Arg	Pro	Asp	Val	Val	Glu	Asn	Gln	Pro	Asp	Ala
			85					90					95		
Ala	Ser	Gln	Leu	Asn	Val	Asp	Ala	Ser	Gly	Asn	Leu	Ala	Lys	Glu	Ala
			100					105					110		
Ala	Ala	Val	Gly	Ala	Phe	Leu	Ile	Tyr	Ile	Ser	Ser	Asp	Tyr	Val	Phe
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Asp	Gly	Thr	Asn	Pro	Pro	Tyr	Arg	Glu	Glu	Asp	Ile	Pro	Ala	Pro	Leu
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Asn	Leu	Tyr	Gly	Lys	Thr	Lys	Leu	Asp	Gly	Glu	Lys	Ala	Val	Leu	Glu
145				150						155				160	
Asn	Asn	Leu	Gly	Ala	Ala	Val	Leu	Arg	Ile	Pro	Ile	Leu	Tyr	Gly	Glu
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Val	Glu	Lys	Leu	Glu	Glu	Ser	Ala	Val	Thr	Val	Met	Phe	Asp	Lys	Val
			180					185					190		
Gln	Phe	Ser	Asn	Lys	Ser	Ala	Asn	Met	Asp	His	Trp	Gln	Gln	Arg	Phe
		195				200						205			
Pro	Thr	His	Val	Lys	Asp	Val	Ala	Thr	Val	Cys	Arg	Gln	Leu	Ala	Glu
		210				215						220			
Lys	Arg	Met	Leu	Asp	Pro	Ser	Ile	Lys	Gly	Thr	Phe	His	Trp	Ser	Gly
225				230						235				240	
Asn	Glu	Gln	Met	Thr	Lys	Tyr	Glu	Met	Ala	Cys	Ala	Ile	Ala	Asp	Ala
			245					250					255		
Phe	Asn	Leu	Pro	Ser	Ser	His	Leu	Arg	Pro	Ile	Thr	Asp	Ser	Pro	Val
		260						265					270		
Leu	Gly	Ala	Gln	Arg	Pro	Arg	Asn	Ala	Gln	Leu	Asp	Cys	Ser	Lys	Leu
		275					280					285			
Glu	Thr	Leu	Gly	Ile	Gly	Gln	Arg	Thr	Pro	Phe	Arg	Ile	Gly	Ile	Lys
		290				295				300					
Glu	Ser	Leu	Trp	Pro	Phe	Leu	Ile	Asp	Lys	Arg	Trp	Arg	Gln	Thr	Val
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Phe	His														

<210> 5833
<211> 805
<212> DNA
<213> Homo sapiens

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180
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240
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360
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420
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480
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660
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780
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805

<210> 5834
<211> 268
<212> PRT
<213> Homo sapiens

<400> 5834
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Glu Gln Gln Val Glu Ser Met Thr Pro Lys Pro Val Leu Gln Glu Glu
35 40 45
Asn Asn Gln Glu Ser Phe Ile Ala Phe Ala Arg Val Phe Ser Gly Val
50 55 60
Ala Arg Arg Gly Lys Lys Ile Phe Val Leu Gly Pro Lys Tyr Ser Pro
65 70 75 80
Leu Glu Phe Leu Arg Arg Val Pro Leu Gly Phe Ser Ala Pro Pro Asp

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      85      90      95
Gly Leu Pro Gln Val Pro His Met Ala Tyr Cys Ala Leu Glu Asn Leu
      100      105      110
Tyr Leu Leu Met Gly Arg Glu Leu Glu Tyr Leu Glu Glu Val Pro Pro
      115      120      125
Gly Asn Val Leu Gly Ile Gly Gly Leu Gln Asp Phe Val Leu Lys Ser
      130      135      140
Ala Thr Leu Cys Ser Leu Pro Ser Cys Pro Pro Phe Ile Pro Leu Asn
      145      150      155      160
Phe Glu Ala Thr Pro Ile Val Arg Val Ala Val Glu Pro Lys His Pro
      165      170      175
Ser Glu Met Pro Gln Leu Val Lys Gly Met Lys Leu Leu Asn Gln Ala
      180      185      190
Asp Pro Cys Val Gln Ile Leu Ile Gln Glu Thr Gly Glu His Val Leu
      195      200      205
Val Thr Ala Gly Glu Val His Leu Gln Arg Cys Leu Asp Asp Leu Lys
      210      215      220
Glu Arg Phe Ala Lys Ile His Ile Ser Val Ser Glu Pro Ile Ile Pro
      225      230      235      240
Phe Arg Glu Thr Ile Thr Lys Pro Pro Lys Val Asp Met Val Asn Glu
      245      250      255
Glu Ile Gly Lys Gln Gln Lys Val Ala Val Ile His
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<210> 5835
 <211> 420
 <212> DNA
 <213> Homo sapiens

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120
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180
ttctttgatg tgttggggaa tgacaggagg agagaatggg cagccctggg aaacatgtct
240
aaagaggatg ccatggtgga gtttgtcaag ctcttaaata ggtgttgcca tctcttttca
300
acatatgttg cgtcccacaa aatagagaag gaagagcaag acaaaaaaag gaaggaggaa
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420

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<210> 5836
 <211> 140
 <212> PRT
 <213> Homo sapiens

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<400> 5836
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Ala Leu Arg Phe Phe Lys Glu Lys Asp Gly Lys Ala Phe His Pro Thr

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Gly	Pro	Tyr	Asn	Pro	Asp	Thr	Cys	Pro	Glu	Val	Gly	Phe	Phe	Asp	Val
	50					55					60				
Leu	Gly	Asn	Asp	Arg	Arg	Arg	Glu	Trp	Ala	Ala	Leu	Gly	Asn	Met	Ser
65					70					75				80	
Lys	Glu	Asp	Ala	Met	Val	Glu	Phe	Val	Lys	Leu	Leu	Asn	Arg	Cys	Cys
			85						90					95	
His	Leu	Phe	Ser	Thr	Tyr	Val	Ala	Ser	His	Lys	Ile	Glu	Lys	Glu	Glu
			100					105					110		
Gln	Asp	Lys	Lys	Arg	Lys	Glu	Glu	Glu	Glu	Arg	Arg	Arg	Arg	Glu	Glu
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Glu	Glu	Arg	Glu	Arg	Leu	Gln	Lys	Glu	Glu	Glu	Lys				
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<210> 5837

<211> 582

<212> DNA

<213> Homo sapiens

<400> 5837

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<210> 5838

<211> 88

<212> PRT

<213> Homo sapiens

<400> 5838

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			20					25				30			
Leu	Ala	Gln	Lys	Thr	Asn	Lys	Ala	Trp	Ala	Lys	Gly	Asp	Ile	Gln	Gly

35 40 45
Ala Gly Ala Ala Ser Arg Arg Ala Phe Leu Leu Gly Val Leu Ala Val
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Gly Leu Gly Val Cys Thr Tyr Ala Ala Ala Leu Val Thr Leu Ala Ala
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<210> 5839
<211> 1895
<212> DNA
<213> Homo sapiens

<400> 5839
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<210> 5840
<211> 138
<212> PRT
<213> Homo sapiens

<400> 5840
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35 40 45
Pro Arg Gly Ser Gly Phe Pro Ala Gln Gly Ile Phe Asp Pro Cys Gln
50 55 60
Arg Arg Glu Arg Glu Leu Ser Trp Phe Pro Phe His Leu Phe Ser Gly
65 70 75 80
Cys Phe Lys Ala Asn Ile Pro Val Pro Asn Val Leu Cys Gly Leu Asn
85 90 95
Pro Gly Arg Gly Gln Gly His Ile Gln Val Gly Leu Ala Ser Ser Thr
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Thr Phe Trp Pro Gln Gln Arg Met Gly Phe His Gln Ser Leu Ser Thr
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Ser Arg Phe Pro Lys Glu Ser Pro Arg Ser
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<210> 5841
<211> 3411
<212> DNA
<213> Homo sapiens

<400> 5841
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<210> 5846
<211> 257
<212> PRT
<213> Homo sapiens

<400> 5846
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35 40 45
Ser Ala Ile Glu Ala Met Lys Lys Ala Tyr Gln Glu Glu Leu Ser Arg
50 55 60
Glu Leu Ser Lys Thr Arg Ser Leu Gln Gln Gly Pro Asp Gly Leu Arg
65 70 75 80
Lys Gln His Gln Ser Asp Val Glu Ala Leu Lys Arg Glu Leu Gln Val
85 90 95
Leu Ser Glu Gln Tyr Ser Gln Lys Cys Leu Glu Ile Gly Ala Leu Met
100 105 110
Arg Gln Ala Glu Glu Arg Glu His Thr Leu Arg Arg Cys Gln Gln Glu
115 120 125
Gly Gln Glu Leu Leu Arg His Asn Gln Glu Leu His Gly Arg Leu Ser
130 135 140
Glu Glu Ile Asp Gln Leu Arg Gly Phe Ile Ala Ser Gln Gly Met Gly
145 150 155 160
Asn Gly Cys Gly Arg Ser Asn Glu Arg Ser Ser Cys Glu Leu Glu Val
165 170 175
Leu Leu Arg Val Lys Glu Asn Glu Leu Gln Tyr Leu Lys Lys Glu Val
180 185 190
Gln Cys Leu Arg Asp Glu Leu Gln Met Met Gln Lys Asp Lys Arg Phe
195 200 205
Thr Ser Gly Lys Tyr Gln Asp Val Tyr Val Glu Leu Ser His Ile Lys

210	215	220
Thr Arg Ser Glu Arg Glu Ile Glu Gln Leu Lys Glu His Leu Arg Leu		
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	245	250
		255

Glu

<210> 5847
 <211> 1021
 <212> DNA
 <213> Homo sapiens

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 180
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<210> 5848
 <211> 120
 <212> PRT

<213> Homo sapiens

<400> 5848

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 35 40 45
 Gly Ser Ile Arg Gly Ala Ala Pro Val Ala Val Glu Pro Gly Ala Ala
 50 55 60
 Val Arg Ser Leu Leu Ser Pro Gly Leu Leu Pro His Leu Leu Pro Ala
 65 70 75 80
 Leu Gly Phe Lys Asn Lys Thr Val Leu Lys Lys Arg Cys Lys Asp Cys
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 Tyr Leu Val Lys Arg Arg Gly Arg Trp Tyr Val Tyr Cys Lys Thr His
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 Pro Arg His Lys Gln Arg Gln Met
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<210> 5849

<211> 3174

<212> DNA

<213> Homo sapiens

<400> 5849

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 840

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<210> 5850

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5850

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			20					25					30		
Cys	Thr	Gln	Thr	Gly	His	Ala	Gln	Pro	Cys	Pro	Ser	Ala	Pro	Ser	Thr
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Gly	Pro	Ile	His	Ile	Ala	Glu	Gly	Gly	Arg	Gly	Arg	Pro	Pro	Pro	Gly
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Ser	Ala	Ser	Asn	Pro	Gln	Pro	Pro	Gly	Ser	Pro	His	Cys	Pro	Ser	Ala
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			85					90						95	
Val	Pro	Arg	Val	Arg	Arg	Pro	Gly	Leu	Ala	Gly	His	Pro	Val	Thr	His
			100					105					110		
Arg	Ile	Asn	Arg	Lys	Thr	Ala	Ser	Pro	Pro	Asn	Leu	Cys	Pro	Arg	His
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Asn	Met	Ser	Arg	Ser	Glu	Ser	Cys	Thr	Pro	Arg	Ser	Arg	Ala	Pro	Leu
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<210> 5851

<211> 488

<212> DNA

<213> Homo sapiens

<400> 5851

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<210> 5852

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5852

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Asn	Lys	Thr	Ser	Glu	Asp	Val	Thr	Met	Ala	Ala	Ala	Ser	Pro	Val	Thr
			20					25					30		
Leu	Thr	Lys	Gly	Thr	Ser	Ala	Ala	His	Leu	Asn	Ser	Met	Glu	Val	Thr
		35				40					45				
Thr	Glu	Asp	Thr	Ser	Arg	Thr	Asp	Ala	Tyr	Glu	Ser	Tyr	Lys	Lys	Lys
	50				55					60					
Asp	Tyr	Thr	Gln	Val	Asp	Tyr	Leu	Ile	Asn	Gly	Met	Tyr	Ala	Asp	Ser
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Glu	Met														

<210> 5853

<211> 487

<212> DNA

<213> Homo sapiens

<400> 5853

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487

<210> 5854
<211> 68
<212> PRT
<213> Homo sapiens

<400> 5854
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Tyr Arg Arg Ser Gln Glu Gly Gly Pro Ala Arg Pro Ala Ala Pro Asp
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Thr Pro Ser Gly Arg Ser Gly Pro Ala Ala Pro Trp Arg Thr Pro Ala
35 40 45
Arg Thr Pro Pro Arg Leu Leu Pro Thr Leu Cys Pro Val Thr Pro Val
50 55 60
Ser Trp Pro Leu
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<210> 5855
<211> 362
<212> DNA
<213> Homo sapiens

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360
an
362

<210> 5856
<211> 113
<212> PRT

<213> Homo sapiens

<400> 5856

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 Val Thr Ala Pro Leu Cys Ser Ala Asp Pro Leu Leu Ala Val Pro Pro
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 Ser Pro Pro Asp Pro Pro Ala Gly Thr Cys Trp Gly Leu Trp Gly Pro
 35 40 45
 Lys Arg Glu Gly Val Asn Glu Val Val Ala Glu Val Leu Leu Ala Ala
 50 55 60
 His Glu Gly Val Gly Asp Gln Gly Glu Ala Gly Ala His Pro Val Leu
 65 70 75 80
 Ser Asp Ala Gly Leu Leu Val Leu Gly Leu Arg Ala Ala Leu Gly Glu
 85 90 95
 His Gln Ala His Leu Gly Ser Ala Leu Asn Glu His Gln Arg Val Leu
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<210> 5857

<211> 1751

<212> DNA

<213> Homo sapiens

<400> 5857

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 1751

<210> 5858
 <211> 434
 <212> PRT
 <213> Homo sapiens

<400> 5858
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 Gly Gly Gln Gly Arg Gly Gly Glu Lys Pro Pro His Leu Ala Ala Leu
 35 40 45
 Ile Leu Ala Arg Gly Gly Ser Lys Gly Ile Pro Leu Lys Asn Ile Lys
 50 55 60
 His Leu Ala Gly Val Pro Leu Ile Gly Trp Val Leu Arg Ala Ala Leu
 65 70 75 80
 Asp Ser Gly Ala Phe Gln Ser Val Trp Val Ser Thr Asp His Asp Glu
 85 90 95
 Ile Glu Asn Val Ala Lys Gln Phe Gly Ala Gln Val His Arg Arg Ser
 100 105 110
 Ser Glu Val Ser Lys Asp Ser Ser Thr Ser Leu Asp Ala Ile Ile Glu

115	120	125
Phe Leu Asn Tyr His Asn Glu Val Asp Ile Val Gly Asn Ile Gln Ala		
130	135	140
Thr Ser Pro Cys Leu His Pro Thr Asp Leu Gln Lys Val Ala Glu Met		
145	150	155
Ile Arg Glu Glu Gly Tyr Asp Ser Val Phe Ser Val Val Arg Arg His		
165	170	175
Gln Phe Arg Trp Ser Glu Ile Gln Lys Gly Val Arg Glu Val Thr Glu		
180	185	190
Pro Leu Asn Leu Asn Pro Ala Lys Arg Pro Arg Arg Gln Asp Trp Asp		
195	200	205
Gly Glu Leu Tyr Glu Asn Gly Ser Phe Tyr Phe Ala Lys Arg His Leu		
210	215	220
Ile Glu Met Gly Tyr Leu Gln Gly Gly Lys Met Ala Tyr Tyr Glu Met		
225	230	235
Arg Ala Glu His Ser Val Asp Ile Asp Val Asp Ile Asp Trp Pro Ile		
245	250	255
Ala Glu Gln Arg Val Leu Arg Tyr Gly Tyr Phe Gly Lys Glu Lys Leu		
260	265	270
Lys Glu Ile Lys Leu Leu Val Cys Asn Ile Asp Gly Cys Leu Thr Asn		
275	280	285
Gly His Ile Tyr Val Ser Gly Asp Gln Lys Glu Ile Ile Ser Tyr Asp		
290	295	300
Val Lys Asp Ala Ile Gly Ile Ser Leu Leu Lys Lys Ser Gly Ile Glu		
305	310	315
Val Arg Leu Ile Ser Glu Arg Ala Cys Ser Lys Gln Thr Leu Ser Ser		
325	330	335
Leu Lys Leu Asp Cys Lys Met Glu Val Ser Val Ser Asp Lys Leu Ala		
340	345	350
Val Val Asp Glu Trp Arg Lys Glu Met Gly Leu Cys Trp Lys Glu Val		
355	360	365
Ala Tyr Leu Gly Asn Glu Val Ser Asp Glu Glu Cys Leu Lys Arg Val		
370	375	380
Gly Leu Ser Gly Ala Pro Ala Asp Ala Cys Ser Thr Ala Gln Lys Ala		
385	390	395
Val Gly Tyr Ile Cys Lys Cys Asn Gly Gly Arg Gly Ala Ile Arg Glu		
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420	425	430
Gln Lys		

<210> 5859
 <211> 2267
 <212> DNA
 <213> Homo sapiens

<400> 5859
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 180

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420
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480
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1680
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1740
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1800

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 1860
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 1920
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 2160
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 2267

<210> 5860
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 5860
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 Ser Arg Ala Ser Glu Ala Ser Gly Ser Leu Leu Leu Arg Phe Phe Leu
 35 40 45
 Gln Met Gly Leu Gly Arg Cys Arg Phe Cys Phe Ser Pro Trp Leu Pro
 50 55 60
 Val Arg Pro Gln Pro Ser Gly Cys Asp Ile Ile Glu Ser Ala Val Ser
 65 70 75 80
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 85 90 95

<210> 5861
 <211> 1951
 <212> DNA
 <213> Homo sapiens

<400> 5861
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 aagctatttg agaaagtcaa agaagtttgt ccaaagtgtc atgagaagat cagagctatt
 240
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 360

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420
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600
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<210> 5862

<211> 514

<212> PRT

<213> Homo sapiens

<400> 5862

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Pro Asp Leu Lys Val Ile Tyr Ile Leu Val Arg Pro Lys Ala Gly Gln
35 40 45
Thr Leu Gln Gln Arg Val Phe Gln Ile Leu Asp Ser Lys Leu Phe Glu
50 55 60
Lys Val Lys Glu Val Cys Pro Asn Val His Glu Lys Ile Arg Ala Ile
65 70 75 80
Tyr Ala Asp Leu Asn Gln Asn Asp Phe Ala Ile Ser Lys Glu Asp Met
85 90 95
Gln Glu Leu Leu Ser Cys Thr Asn Ile Ile Phe His Cys Ala Ala Thr
100 105 110
Val Arg Phe Asp Asp Thr Leu Arg His Ala Val Gln Leu Asn Val Thr
115 120 125
Ala Thr Arg Gln Leu Leu Leu Met Ala Ser Gln Met Pro Lys Leu Glu
130 135 140
Ala Phe Ile His Ile Ser Thr Ala Tyr Ser Asn Cys Asn Leu Lys His
145 150 155 160
Ile Asp Glu Val Ile Tyr Pro Cys Pro Val Glu Pro Lys Lys Lys Ile
165 170 175
Ile Asp Ser Leu Glu Trp Leu Asp Asp Ala Ile Ile Asp Glu Ile Thr
180 185 190
Pro Lys Leu Ile Arg Asp Trp Pro Asn Ile Tyr Thr Tyr Thr Lys Ala
195 200 205
Leu Gly Glu Met Val Val Gln Gln Glu Ser Arg Asn Leu Asn Ile Ala
210 215 220
Ile Ile Arg Pro Ser Ile Val Gly Ala Thr Trp Gln Glu Pro Phe Pro
225 230 235 240
Gly Trp Val Asp Asn Ile Asn Gly Pro Asn Gly Ile Ile Ile Ala Thr
245 250 255
Gly Lys Gly Phe Leu Arg Ala Ile Lys Ala Thr Pro Met Ala Val Ala
260 265 270
Asp Val Ile Pro Val Asp Thr Val Val Asn Leu Met Leu Ala Val Gly
275 280 285
Trp Tyr Thr Ala Val His Arg Pro Lys Ser Thr Leu Val Tyr His Ile
290 295 300
Thr Ser Gly Asn Met Asn Pro Cys Asn Trp His Lys Met Gly Val Gln
305 310 315 320
Val Leu Ala Thr Phe Glu Lys Ile Pro Phe Glu Arg Pro Phe Arg Arg
325 330 335
Pro Asn Ala Asn Phe Thr Ser Asn Ser Phe Thr Ser Gln Tyr Trp Asn
340 345 350
Ala Val Ser His Arg Ala Pro Ala Ile Ile Tyr Asp Cys Tyr Leu Arg
355 360 365
Leu Thr Gly Arg Lys Pro Arg Met Thr Lys Leu Met Asn Arg Leu Leu

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      370      375      380
Arg Thr Val Ser Met Leu Glu Tyr Phe Ile Asn Arg Ser Trp Glu Trp
385      390      395      400
Ser Thr Tyr Asn Thr Glu Met Leu Met Ser Glu Leu Ser Pro Glu Asp
      405      410      415
Gln Arg Val Phe Asn Phe Asp Val Arg Gln Leu Asn Trp Leu Glu Tyr
      420      425      430
Ile Glu Asn Tyr Val Leu Gly Val Lys Lys Tyr Leu Leu Lys Glu Asp
      435      440      445
Met Ala Gly Ile Pro Lys Ala Lys Gln Arg Leu Lys Arg Leu Arg Asn
      450      455      460
Ile His Tyr Leu Phe Asn Thr Ala Leu Phe Leu Ile Ala Trp Arg Leu
465      470      475      480
Leu Ile Ala Arg Ser Gln Met Ala Arg Asn Val Trp Phe Phe Ile Val
      485      490      495
Ser Phe Cys Tyr Lys Phe Leu Ser Tyr Phe Arg Ala Ser Ser Thr Leu
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Lys Val

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<210> 5863
 <211> 438
 <212> DNA
 <213> Homo sapiens

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120
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180
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240
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300
tgagtgtgtt tgtccaactg gcaaggaaca gtctggggac aaacagtgcc ttatttggag
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420
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438

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<210> 5864
 <211> 104
 <212> PRT
 <213> Homo sapiens

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<400> 5864
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Asp Cys Ser Leu Pro Val Gly Gln Thr His Ser Asn Thr Lys Leu Phe
20      25      30
Cys Gln Tyr Leu Ser Tyr Val Pro Phe Met Ala Glu Tyr Gln Ser Lys

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<210> 5866
<211> 212
<212> PRT
<213> Homo sapiens

<400> 5866
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20 25 30
Arg Ala Gly Arg Thr Ala Arg Ala Asn Asn Pro Gly Ile Val Leu Thr
35 40 45
Phe Val Leu Pro Thr Glu Gln Phe His Leu Gly Lys Ile Glu Glu Leu
50 55 60
Leu Val Glu Arg Thr Gly Ala Pro Phe Cys Ser Pro Thr Ser Ser Gly
65 70 75 80
Trp Arg Arg Ser Arg Ala Ser Ala Ile Ala Gly Val His Pro Gln
85 90 95
Asp Ala Met Arg Ser Val Thr Lys Gln Ala Ile Arg Glu Ala Arg Leu
100 105 110
Lys Glu Ile Lys Glu Glu Leu Leu His Ser Glu Lys Leu Lys Thr Tyr
115 120 125
Phe Glu Asp Asn Pro Arg Asp Leu Gln Leu Leu Arg His Asp Leu Pro
130 135 140
Leu His Pro Ala Val Val Lys Pro His Leu Gly His Val Pro Asp Tyr
145 150 155 160
Leu Val Pro Pro Ala Leu Arg Gly Leu Val Arg Pro His Lys Lys Arg
165 170 175
Lys Lys Leu Ser Ser Ser Cys Arg Lys Ala Lys Arg Ala Lys Ser Gln
180 185 190
Asn Pro Leu Arg Ser Phe Lys His Lys Gly Lys Lys Phe Arg Pro Thr
195 200 205
Ala Lys Pro Ser
210

<210> 5867
<211> 1882
<212> DNA
<213> Homo sapiens

<400> 5867
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gcgtcccatt gccttcactg cccgttccag gaagctctgg atcaacttca agacaagcga
180
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240

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360
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480
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1860

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1882

<210> 5868
<211> 131
<212> PRT
<213> Homo sapiens

<400> 5868
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Trp Ile Asn Phe Lys Thr Ser Glu Ala Asn Ser Ala Arg Gly Phe Gln
35 40 45
Ile Pro Tyr Val Thr Tyr Asp Glu Asp Tyr Glu Gln Leu Val Glu Asp
50 55 60
Ile Val Arg Asp Gly Arg Leu Tyr Ala Ser Glu Asn His Gln Glu Ile
65 70 75 80
Leu Lys Asp Lys Lys Leu Ile Lys Ala Phe Phe Glu Val Leu Ala His
85 90 95
Pro Gln Asn Tyr Phe Lys Tyr Thr Glu Lys His Lys Glu Met Leu Pro
100 105 110
Lys Ser Phe Ile Lys Leu Leu Arg Ser Lys Val Ser Ser Phe Leu Arg
115 120 125
Pro Tyr Lys
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<210> 5869
<211> 910
<212> DNA
<213> Homo sapiens

<400> 5869
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180
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480
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720
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<210> 5870

<211> 129

<212> PRT

<213> Homo sapiens

<400> 5870

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			20					25					30		
Gly	Ser	Leu	Leu	Ile	Met	His	His	Glu	Ala	Ser	Thr	His	Arg	Val	Ile
		35				40						45			
Pro	Thr	Leu	Val	Gln	Thr	Gly	Leu	His	Gly	Arg	His	Ile	Leu	Gly	Arg
	50					55				60					
His	Val	Phe	Gly	Ser	Ala	Asn	Leu	Phe	Ser	Cys	Ala	Ile	Asp	Gln	
65					70				75				80		
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<212> PRT

<213> Homo sapiens

<400> 5876

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Phe	Cys	Phe	Ser	His	Ile	Ser	Ser	Ser	Glu	Ser	Ile	Ala	Gln	Ser	Ile
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Cys	Glu	Leu	Phe	Gln	Thr	Ser	Pro	Gln	Arg	Gly	Asn	Leu	Pro	Thr	Ser
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<212> DNA

<213> Homo sapiens

<400> 5877

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<210> 5878

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<212> PRT

<213> Homo sapiens

<400> 5878

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<211> 1555

<212> DNA

<213> Homo sapiens

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<210> 5880
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 <212> PRT
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<400> 5880
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 Phe Tyr Asp Val Glu Ala Leu Arg Asp Tyr Leu Leu Gln Arg Glu Met
 50 55 60
 Tyr Lys Val His Glu Lys Asn Arg Ser Tyr Thr Trp Leu Glu Lys Gln
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 His Gly Pro Tyr Gly Ala Gly Ala Phe Phe Ile Leu Lys Gln Gly Gly
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 Ala Val Lys Phe Arg Asp Lys Glu Trp Ile Arg Pro Asp Lys Tyr Gly
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 His Phe Ser Gln Glu Phe Trp Asn Phe Cys Glu Val Pro Val Glu Ala
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Ala Pro Ser Leu Asp Asp Pro Ala Arg Arg His Met Thr Ile His Val
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Pro Leu Asp Ala Ser Arg Ser Lys Gln Leu Ile Ser Glu Trp Lys Gln
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<213> Homo sapiens

<400> 5886

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<211> 3779

<212> DNA

<213> Homo sapiens

<400> 5887

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<211> 166

<212> PRT

<213> Homo sapiens

<400> 5888

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<212> DNA

<213> Homo sapiens

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<210> 5890

<211> 118

<212> PRT

<213> Homo sapiens

<400> 5890

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<210> 5891

<211> 1459

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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Leu Val Met Thr Phe Leu Phe Arg Asn Gly Ser Leu Gln Glu Lys Leu
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Trp Ala Ile Leu Gln Ala Thr Tyr Ile His Ser Trp Asn Leu Ala Arg
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Phe Val Phe Thr Tyr Lys Gly Leu Arg Ala Leu Gln Ser Tyr Ile Gln
85 90 95
Gly Lys Thr Tyr Pro Ala His Ala Phe Leu Ala Ala Phe Leu Gly Gly
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Ile Leu Val Phe Gly Glu Asn Asn Asn Ile Asn Ser Gln Ile Asn Met
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Lys Gly Tyr Ile Pro Glu Pro Arg Trp Asp Pro Phe Pro Leu Leu Thr
145 150 155 160
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165 170 175
Thr Leu Gln Pro Ser Leu Gln Ser Ser Met Thr Tyr Leu Tyr Glu Asp
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Arg Pro Ser Asn
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<210> 5893
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<212> DNA
<213> Homo sapiens

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<210> 5894

<211> 260

<212> PRT

<213> Homo sapiens

<400> 5894

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 Gly Asp Gly Gln Leu Pro Glu Gly Leu Pro Glu Asn Asp Ala Ala Met
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 Ser Phe Glu Ala Phe Gln Arg Gln Ile Phe Asp Glu Asp Gln Asn Asp
 195 200 205
 Pro Leu Leu Pro Gly Ser Leu Asp Leu Pro Glu Leu Gln Pro Ala Ala
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 <212> DNA
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<210> 5896

<211> 261

<212> PRT

<213> Homo sapiens

<400> 5896

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Lys	Lys	Lys	Met	Glu	Asn	Glu	Ser	Ala	Thr	Glu	Gly	Glu	Asp	Ser	Ala
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<210> 5897

<211> 1930

<212> DNA

<213> Homo sapiens

<400> 5897

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<210> 5898

<211> 242

<212> PRT

<213> Homo sapiens

<400> 5898

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			20					25					30		
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Thr	Asn	Asn	Asp	Pro	Gly	Leu	Phe	Val	Tyr	Cys	Cys	Asp	Phe	Ser	Ser
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Thr	Ala	Ile	Glu	Leu	Val	Gln	Thr	Asn	Ser	Glu	Tyr	Asp	Pro	Ser	Arg
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<210> 5899

<211> 1589

<212> DNA

<213> Homo sapiens

<400> 5899

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Gly Gln Gly Phe Asp Arg His Leu Phe Ala Leu Arg His Leu Ala Ala
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Gln Ile Asn His Asn Val Leu Ser Thr Ser Thr Leu Ser Ser Pro Ala
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Trp Gly Arg Thr Tyr Ser Phe Thr Ser Ala Met Ser Arg Gly Cys Val
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<212> PRT

<213> Homo sapiens

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Pro Gly Pro Val Arg Arg Pro Met Arg Lys Ser Phe Ser Gln Pro Gly
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Leu Arg Ser Leu Ala Phe Arg Lys Glu Leu Gln Asp Gly Gly Leu Arg
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Arg Thr Met Leu Phe Thr Ile Gly Gln Ser Glu Val Tyr Leu Ile Ser
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Pro Asp Thr Lys Lys Ile Ala Leu Glu Lys Asn Phe Lys Glu Ile Ser
130 135 140
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785 790 795 800
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<211> 1252

<212> PRT

<213> Homo sapiens

<400> 5922

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Lys	Ser	Val	Ile	Ile	Trp	Thr	Ser	Lys	Leu	Glu	Gly	Ile	Leu	Lys	Tyr
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Gly Thr Val Gly Glu Gln	Asn Ser Trp Val Trp Thr Cys	Gln Ala Lys		
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Gly Leu Lys Asn Gly Gln	Ile Leu Lys Ile Phe Val	Asp Asn Leu Phe		
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Met Glu Ala Leu Glu Gly	Leu Asp Phe Glu Thr Ala	Lys Lys Ala Phe		
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Ile Arg Val Gln Asp Leu	Arg Tyr Leu Glu Leu Ile	Ser Ser Ile Glu		
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Glu Arg Lys Lys Arg Gly	Glu Thr Asn Asn Asp Leu	Phe Leu Ala Asp		

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Arg	Ser	Gly	His	Glu	Asn	Leu	Ala	Leu	Glu	Met	Tyr	Thr	Asp	Leu	Cys			
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Cys	Ala	Thr	Tyr	Leu	Lys	Lys	Leu	Asp	Ser	Pro	Gly	Tyr	Ala	Ala	Glu			
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Tyr Phe Arg Ser Leu Leu Pro Asp Ala Ser Ile Thr Met Cys Pro Ser		
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Cys Phe Gln Val Gly Gly His Pro Gly Ser Ser His Val Leu Leu Leu		
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 <213> Homo sapiens

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Ser	Leu	Tyr	Ala	Pro	Asp	Tyr	Ser	Ser	Arg	Leu	Asp	Ile	Val	Arg	Ala
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<210> 5926
<211> 526
<212> PRT
<213> Homo sapiens

<400> 5926
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35 40 45
Ala Pro Pro Pro Ile Ser Pro Val Leu Pro Leu Val Pro Pro Pro Ala
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Thr Ala Leu Asn Pro Pro Ala Pro Pro Thr Phe His Gln Pro Gln Lys
65 70 75 80
Phe Ala Gly Val Asn Lys Ala Pro Ser Val Ile Thr His Thr Ala Ser
85 90 95
Ala Thr Leu Thr His Asp Ala Pro Ala Thr Thr Phe Ser Gln Ser Gln
100 105 110
Gly Leu Val Ile Thr Thr His His Pro Ala Pro Ser Ala Ala Pro Cys
115 120 125
Gly Leu Ala Leu Ser Pro Val Thr Arg Pro Pro Gln Pro Arg Leu Thr
130 135 140
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145 150 155 160
Pro His Lys Ile Val Pro Ala Pro Lys Pro Glu Pro Val Ser Leu Val
165 170 175
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210 215 220
Arg Ala Pro Gly Val Pro Glu Phe His Ser Ser Ile Leu Val Thr Asp
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Pro Ser Thr Ala Gln Asp Pro Leu Gly Lys Gly Glu Gln Val Pro Leu

260 265 270
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Pro Asn Ser Gly Gln Ala Ser Pro Cys Ala Ser Glu Gln Ser Pro Ser
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325 330 335
Lys Arg Arg Phe Asn Ile Lys Met Cys Phe Asp Met Leu Asn Ser Leu
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Thr Val Glu Tyr Ile Thr Lys Leu Gln Gln Glu Arg Gly Gln Met Gln
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Glu Glu Ala Arg Arg Leu Arg Glu Glu Ile Glu Glu Leu Asn Ala Thr
385 390 395 400
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Arg Arg Gln Phe Asp His Met Lys Asp Met Phe Asp Glu Tyr Val Lys
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Thr Arg Thr Leu Gln Asn Trp Lys Phe Trp Ile Phe Ser Ile Ile Ile
435 440 445
Lys Pro Leu Phe Glu Ser Phe Lys Gly Met Val Ser Thr Ser Ser Leu
450 455 460
Glu Glu Leu His Arg Thr Ala Leu Ser Trp Leu Asp Gln His Cys Ser
465 470 475 480
Leu Pro Ile Leu Arg Pro Met Val Leu Ser Thr Leu Arg Gln Leu Ser
485 490 495
Thr Ser Thr Ser Ile Leu Thr Asp Pro Ala Gln Leu Pro Glu Gln Ala
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Ser Lys Ala Val Thr Arg Ile Gly Lys Arg Leu Gly Glu Ser
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<210> 5927

<211> 1786

<212> DNA

<213> Homo sapiens

<400> 5927

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<210> 5928

<211> 202

<212> PRT

<213> Homo sapiens

<400> 5928

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35 40 45
Phe Leu Met Glu Asn Arg Val Gln Ser Phe Tyr Gln Gln Glu Leu Glu
50 55 60
Met Val Glu Ser Leu Leu Ser Leu Ala Asn Gln Pro Val Ile His Ser
65 70 75 80
Ala Cys Ser Asp Gln Val Asn Phe Lys Lys Asp Thr Thr Ser Lys Ala
85 90 95
Ile His Ser Ile Phe Lys Asn Ala Ile Gln Leu Leu Gln Glu Lys Gly
100 105 110
Leu Val Phe Gln Lys Asp Asp Gly Phe Asp Asn Leu Tyr Tyr Val Thr
115 120 125
Arg Glu Asp Lys Asp Leu His Arg Lys Ile His Arg Ile Ile Gln Gln
130 135 140
Asp Cys Gln Lys Pro Asn His Met Glu Lys Gly Cys His Phe Leu His
145 150 155 160
Ile Leu Ala Cys Ala Arg Leu Ser Ile Arg Pro Gly Leu Ser Glu Ala
165 170 175
Val Leu Gln Gln Val Leu Glu Leu Leu Glu Asp Gln Ser Asp Ile Val
180 185 190
Ser Thr Met Glu His Tyr Tyr Thr Ala Phe
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<210> 5929

<211> 606

<212> DNA

<213> Homo sapiens

<400> 5929

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<210> 5930
<211> 144
<212> PRT
<213> Homo sapiens

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35 40 45
Leu Gln Pro Ala Gly Ser Val Ser Ser Thr Pro Leu Ser Thr Pro Cys
50 55 60
Ser Ser Val Pro Ser Ser Pro Ser Phe Ser Pro Thr Glu Gln Lys Thr
65 70 75 80
His Leu Glu Asp Leu Tyr Trp Met Ala Ser Asn Tyr Gln Gln Met Asn
85 90 95
Pro Glu Ala Leu Asn Leu Thr Pro Glu Asp Ala Val Glu Ala Leu Ile
100 105 110
Gly Ser His Pro Val Pro Gln Pro Leu Gln Ser Phe Asp Ser Phe Arg
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Gly Ala His His His His His His His His Pro His Pro His His Ala
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<210> 5931
<211> 478
<212> DNA
<213> Homo sapiens

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180
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<210> 5932
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<212> PRT
<213> Homo sapiens

<400> 5932

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 35 40 45
 Ala Gly Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln
 50 55 60
 Glu Val Met Glu Glu Glu Trp Asn Ala Leu Gln Ser Val Glu Asn Cys
 65 70 75 80
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<210> 5933

<211> 1953

<212> DNA

<213> Homo sapiens

<400> 5933

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<210> 5934

<211> 314

<212> PRT

<213> Homo sapiens

<400> 5934

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<210> 5935
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<212> DNA
<213> Homo sapiens
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<211> 154
<212> PRT
<213> Homo sapiens

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35 40 45
Tyr His Pro Thr Pro Ser Gln Thr Arg Leu Ala Thr Gln Leu Thr Glu
50 55 60
Glu Glu Gln Ile Arg Ile Ala Gln Arg Ile Gly Leu Ile Gln His Leu
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Pro Lys Gly Val Tyr Asp Pro Gly Arg Asp Gly Ser Glu Lys Lys Ile
85 90 95
Arg Glu Cys Val Ile Cys Met Met Asp Phe Val Tyr Gly Asp Pro Ile
100 105 110
Arg Phe Leu Pro Cys Met His Ile Tyr His Leu Asp Cys Ile Asp Asp
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Ala Ala Leu Leu Ser Ser Tyr Glu Thr Asn
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<210> 5937
<211> 1536
<212> DNA
<213> Homo sapiens

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<211> 406

<212> PRT

<213> Homo sapiens

<400> 5938

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115          120          125
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35 40 45
Ile Ser Gln Gln Leu Gly Leu Glu Leu Asn Thr Val Ser Asn Phe Phe
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5121

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<211> 2590

<212> DNA

<213> Homo sapiens

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<211> 89

<212> PRT

<213> Homo sapiens

<400> 5942

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			20					25				30			
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<212> DNA

<213> Homo sapiens

<400> 5943

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<212> PRT

<213> Homo sapiens

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Arg	Asp	Leu	Ser	Ser	Pro	Gln	Pro	Pro	Pro	Pro	Arg	Phe	Lys	Gln	Phe		
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Arg Ile Arg Arg Gly His Ala Arg Leu Ala Leu Ser Gln Asn Gln Gln
50 55 60
Ser Ser Gly Ala Ala Gly Pro Thr Gly Lys Asn Gly Glu Lys Ile Gln
65 70 75 80
Val Leu Thr Asp Lys Ile Asp Val Leu Leu Gln Gln Ile Glu Glu Leu
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Gly Ser Glu Gly Lys Val Glu Glu Ala Gln Gly Met Met Lys Leu Val
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<212> DNA
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<211> 76
<212> PRT
<213> Homo sapiens

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Glu Arg Lys Arg Lys Ser Asp Asn Glu Gly Arg Lys His Arg Ser Arg
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<212> DNA
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 <212> PRT
 <213> Homo sapiens

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 Glu Glu Ile Ile Lys Arg Val Phe Asp Pro Ala Leu Asn Leu Phe Lys
 65 70 75 80
 Thr Thr Ser Gly Asp Glu Arg Leu Tyr Pro Ser Pro Thr Ser Tyr Ile
 85 90 95
 His Glu Asn Tyr Leu Gln Leu Phe Glu Phe Val Gly Lys Met Leu Gly
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 Lys Ala Val Tyr Glu Gly Ile Val Val Asp Val Pro Phe Ala Ser Phe
 115 120 125
 Phe Leu Ser Gln Leu Leu Gly His His His Ser Val Phe Tyr Ser Ser
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 Val Asp Glu Leu Pro Ser Leu Asp Ser Glu Phe Tyr Lys Asn Leu Thr
 145 150 155 160
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 Ser Tyr Asp Glu Asp Val Met Gly Gln Leu Val Cys His Glu Leu Ile
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 195 200 205
 Ile His Leu Met Ala His Phe Arg Met His Thr Gln Ile Lys Asn Gln

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      245      250      255
Asn Ala Glu Ile Asp Leu Glu Asp Leu Lys Lys His Thr Val Tyr Tyr
      260      265      270
Gly Gly Phe His Gly Ser His Arg Val Ile Ile Trp Leu Trp Asp Ile
      275      280      285
Leu Ala Ser Asp Phe Thr Pro Asp Glu Arg Ala Met Phe Leu Lys Phe
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Val Thr Ser Cys Ser Arg Pro Pro Leu Leu Gly Phe Ala Tyr Leu Lys
305      310      315      320
Pro Pro Phe Ser Ile Arg Cys Val Glu Val Ser Asp Asp Gln Asp Thr
      325      330      335
Gly Asp Thr Leu Gly Ser Val Leu Arg Gly Phe Phe Thr Ile Arg Lys
      340      345      350
Arg Glu Pro Gly Gly Arg Leu Pro Thr Ser Ser Thr Cys Phe Asn Leu
      355      360      365
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 <212> DNA
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<211> 378

<212> PRT

<213> Homo sapiens

<400> 5952

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Asp	Asn	Lys	Gly	Ser	Asn	Asp	Thr	Ile	Phe	Asp	Asn	Glu	Ala	Lys	Asp	
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Val	Glu	Arg	Glu	Val	Cys	Phe	Ile	Asp	Ile	Ala	Cys	Asp	Glu	Ile	Pro	
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Glu	Arg	Tyr	Tyr	Lys	Glu	Ser	Glu	Asp	Pro	Lys	His	Phe	Lys	Ser	Glu	
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Ser	Ser	Ile	Pro	Leu	Leu	Pro	Ser	Ser	Val	Arg	Ser	Ala	Pro	Ser	Ser	
305	310							315					320			
Ala	Pro	Ser	Thr	Pro	Leu	Ser	Thr	Asp	Ala	Pro	Glu	Phe	Leu	Ser	Val	
325							330					335				
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340							345					350				
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<211> 777
<212> DNA
<213> Homo sapiens
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<211> 152
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<213> Homo sapiens

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35 40 45
Arg Gln Leu Xaa Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu
50 55 60
Val Gln Glu Val Met Glu Glu Trp Asn Ala Leu Gln Ser Val Glu
65 70 75 80
Asn Cys Pro Glu Asp Leu Ala Gln Leu Glu Glu Leu Ile Asp Met Ala
85 90 95
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100 105 110
Ile Ser Glu Tyr Glu Lys Ser Leu Gln Phe Asp Glu Lys Cys Leu Ser
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<210> 5955
<211> 1459
<212> DNA
<213> Homo sapiens

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<211> 431

<212> PRT

<213> Homo sapiens

<400> 5956

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Ser	Ala	Cys	Thr	Trp	Ala	Asp	Asp	Leu	Ser	Val	Cys	Tyr	Pro	Ser	Pro
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Ser	Met	Ala	Ala	Ile	Tyr	Gly	Gly	Val	Glu	Gly	Gly	Gly	Thr	Arg	Ser
				85					90					95	
Glu	Val	Leu	Leu	Val	Ser	Glu	Asp	Gly	Lys	Ile	Leu	Ala	Glu	Ala	Asp
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Gly	Gly	Trp	Gly	His	Met	Met	Gly	Asp	Glu	Gly	Ser	Ala	Leu	Ser	Ala
225					230					235					240
Pro	Ser	Ala	Tyr	Trp	Ile	Ala	His	Gln	Ala	Val	Lys	Ile	Val	Phe	Asp
				245					250					255	
Ser	Ile	Asp	Asn	Leu	Glu	Ala	Ala	Pro	His	Asp	Ile	Gly	Tyr	Val	Lys
			260					265					270		
Gln	Ala	Met	Phe	His	Tyr	Phe	Gln	Val	Pro	Asp	Arg	Leu	Gly	Ile	Leu
		275					280					285			
Thr	His	Leu	Tyr	Arg	Asp	Phe	Asp	Lys	Cys	Arg	Phe	Ala	Gly	Phe	Cys
	290					295					300				
Arg	Lys	Ile	Ala	Glu	Gly	Ala	Gln	Gln	Gly	Asp	Pro	Leu	Ser	Arg	Tyr
305					310					315					320
Ile	Phe	Arg	Lys	Ala	Gly	Glu	Met	Leu	Gly	Arg	His	Ile	Val	Ala	Val
			325						330					335	
Leu	Pro	Glu	Ile	Asp	Pro	Val	Leu	Phe	Gln	Gly	Lys	Ile	Gly	Leu	Pro
			340					345					350		
Ile	Leu	Cys	Val	Gly	Ser	Val	Trp	Lys	Ser	Trp	Glu	Leu	Leu	Lys	Glu
		355					360					365			
Gly	Phe	Leu	Leu	Ala	Leu	Thr	Gln	Gly	Arg	Glu	Ile	Gln	Ala	Gln	Asn
	370					375									

<210> 5957

<211> 855

<212> DNA

<213> Homo sapiens

<400> 5957

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tggaagagg ctttcggca gagatgcctg gagagaatga gaaacagccg ggacaggctc
120
ctaaacagg accgccaggc tggaagcagt gggccaggga attctcagaa cagctttcta
180
gttcaaggagg tgatggaaga agagtggaat gctttgcagt cagtggagaa ttgtccagaa
240
gacttggtc agctggagga gctgatagac atggctgtgc tggaggaaat tcaacaggag
300
ctgatcaacc aaggcctgtg atacttgggc tgtgatcctc tagagccagc ttggactcac
360
atcattctat ggggttgaag acaactcatt ccctctgagg agccttgtag atacaagcct
420
tttatttata acttattttg tattgaaact tttaaacaat actgaagaaa aaaaaacttt
480
tccgacatct gttcttggtc ttttgtgaca cagggttgaag ggggaggaat agaaaaagac
540
aaactgcctt ggaggagata aaccaatttt atgtctatca tgttatataa aaatctagaa
600
ataatagatt tgtacagaaa aaaatgataa taaatgagag caaaaacat ataattttaa
660
tctgggtattt tttccccc atgatttagga tgataatcat ttcaaagcac atgtctagct
720
tcagagtagg atttgttcac tggccaaagc ctgccatgaa actatggctt tcagcatctg
780
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840
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855

<210> 5958

<211> 106

<212> PRT

<213> Homo sapiens

<400> 5958

Met	Ala	Glu	Ser	Leu	Arg	Ser	Pro	Arg	Arg	Ser	Leu	Tyr	Lys	Leu	Val
1				5				10					15		
Gly	Ser	Pro	Pro	Trp	Lys	Glu	Ala	Phe	Arg	Gln	Arg	Cys	Leu	Glu	Arg
			20					25				30			
Met	Arg	Asn	Ser	Arg	Asp	Arg	Leu	Leu	Asn	Arg	Tyr	Arg	Gln	Ala	Gly
		35					40				45				
Ser	Ser	Gly	Pro	Gly	Asn	Ser	Gln	Asn	Ser	Phe	Leu	Val	Gln	Glu	Val
	50				55					60					
Met	Glu	Glu	Glu	Trp	Asn	Ala	Leu	Gln	Ser	Val	Glu	Asn	Cys	Pro	Glu
65				70				75					80		
Asp	Leu	Ala	Gln	Leu	Glu	Glu	Leu	Ile	Asp	Met	Ala	Val	Leu	Glu	Glu
			85				90						95		
Ile	Gln	Gln	Glu	Leu	Ile	Asn	Gln	Gly	Leu						

100

105

<210> 5959
<211> 830
<212> DNA
<213> Homo sapiens

<400> 5959
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ttttctcggg gccttatgat gctggttctt gagaagttag ccactgatat tccttgctctg
120
ctatatgatg acaatctctt ctgtcatttg gtggatgaag tactcttggt tgaaagggag
180
ctacacagtg ttcattggcta tcctggcact ttgctaatt gtatgcatat tctatcagag
240
gaaacctgtt ttcaaagatg ggtgacgggg gagagaaaat ttgctcttca aaaaatggac
300
tcaatgcttt cctcagaagc tgcctgggta tgcgaatata aggatattcac tgacgtggat
360
gaaatgaaag ttccagattg tgcagaaact tttatgactc tactcttggt tataactgac
420
aggtataaaa atcttccac agcttccga aagcttcagt tcctggagtt acagaaggac
480
ttagtagatg attttaggat acgattaaca caagtgatga aagaagagac tagagcttcc
540
cttggctttc gatactgtgc aattcttaat gctgtgaact acatctcaac agtactagca
600
gattgggctg acaatgtttt ctttctacaa cttcaacagg ctgcactgga ggtgtttgca
660
gagaataata ctctgagtaa attgcagcta ggacagctag cctctatgga gagctctgtc
720
tttgatgaca tgattaacct cttagaacgt ttaaagcatg atatgttgac ccgtcaagta
780
gaccacgttt ttagagaagt taaagatgct gcaaaattgt ataaaaaga
830

<210> 5960
<211> 251
<212> PRT
<213> Homo sapiens

<400> 5960
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1 5 10 15
Tyr Asp Asp Asn Leu Phe Cys His Leu Val Asp Glu Val Leu Leu Phe
20 25 30
Glu Arg Glu Leu His Ser Val His Gly Tyr Pro Gly Thr Phe Ala Asn
35 40 45
Cys Met His Ile Leu Ser Glu Glu Thr Cys Phe Gln Arg Trp Val Thr
50 55 60
Gly Glu Arg Lys Phe Ala Leu Gln Lys Met Asp Ser Met Leu Ser Ser
65 70 75 80
Glu Ala Ala Trp Val Ser Gln Tyr Lys Asp Ile Thr Asp Val Asp Glu

	85		90		95										
Met	Lys	Val	Pro	Asp	Cys	Ala	Glu	Thr	Phe	Met	Thr	Leu	Leu	Leu	Val
	100							105					110		
Ile	Thr	Asp	Arg	Tyr	Lys	Asn	Leu	Pro	Thr	Ala	Ser	Arg	Lys	Leu	Gln
	115						120					125			
Phe	Leu	Glu	Leu	Gln	Lys	Asp	Leu	Val	Asp	Asp	Phe	Arg	Ile	Arg	Leu
	130						135				140				
Thr	Gln	Val	Met	Lys	Glu	Glu	Thr	Arg	Ala	Ser	Leu	Gly	Phe	Arg	Tyr
145					150					155					160
Cys	Ala	Ile	Leu	Asn	Ala	Val	Asn	Tyr	Ile	Ser	Thr	Val	Leu	Ala	Asp
				165					170					175	
Trp	Ala	Asp	Asn	Val	Phe	Phe	Leu	Gln	Leu	Gln	Gln	Ala	Ala	Leu	Glu
	180							185					190		
Val	Phe	Ala	Glu	Asn	Asn	Thr	Leu	Ser	Lys	Leu	Gln	Leu	Gly	Gln	Leu
	195						200					205			
Ala	Ser	Met	Glu	Ser	Ser	Val	Phe	Asp	Asp	Met	Ile	Asn	Leu	Leu	Glu
	210					215					220				
Arg	Leu	Lys	His	Asp	Met	Leu	Thr	Arg	Gln	Val	Asp	His	Val	Phe	Arg
225					230					235					240
Glu	Val	Lys	Asp	Ala	Ala	Lys	Leu	Tyr	Lys	Lys					
			245						250						

<210> 5961
<211> 585
<212> DNA
<213> Homo sapiens

<400> 5961
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aatgaagcga gaccccgctc taaaaaaaaa aattgagggg tcaaagagga tgccaaactt
120
aattagagac tgagacaggg caggggtgccg aggtgtctgc atgcgtttca tgtggatgcc
180
cgtgtctatt ctggcctgct cctggggccc ctccccactc agccctggct gatgagaatg
240
ggacagggac tcccttctcg tgtccctgtg cagcgtcggc ccaggaggta gcagagcagt
300
atatgcacat ctgggtgtgc cctcctgcat gtccccacac atctgtcatt cctgtctttg
360
cacacctatg tgactccgc atgtttgtgt ccttatgtgt cccatgcatg ctccccatct
420
gaccttgctg gttctcgcgt gtctgtgtgc ggccagtcct gccttcactc tctcatgggt
480
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540
aacagccaat ggtcaagaag actccaaggc ccagatggg tccac
585

<210> 5962
<211> 114
<212> PRT
<213> Homo sapiens

<400> 5962

Met Cys Gly Asp Met Gln Glu Gly Thr Pro Arg Cys Ala Tyr Thr Ala
1 5 10 15
Leu Leu Pro Pro Gly Pro Thr Leu His Arg Asp Thr Arg Arg Glu Ser
20 25 30
Leu Ser His Ser His Gln Pro Gly Leu Ser Gly Glu Gly Ala Gln Glu
35 40 45
Gln Ala Arg Ile Asp Thr Gly Ile His Met Lys Arg Met Gln Thr Pro
50 55 60
Arg His Pro Ala Leu Ser Gln Ser Leu Ile Lys Phe Gly Ile Leu Phe
65 70 75 80
Asp Pro Ser Ile Phe Phe Leu Glu Thr Gly Ser Arg Phe Ile Ala Gln
85 90 95
Ala Glu Cys Ser Gly Tyr Ser Gln Ala Pro Leu Glu Arg Thr Ala Ala
100 105 110
Pro Ser

<210> 5963

<211> 1288

<212> DNA

<213> Homo sapiens

<400> 5963

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120
gaagaaaaag tgaaacgata tgtgaaagat gctgccaaga agggccagaa ggatgtctgc
180
atagttcttg ccaaggagat gatcagggtca aggaaggctg tgagcaagct gtatgcatcc
240
aaagcacaca tgaactcagt gctcatgggg atgaagaacc agctcgcggt cttgcgagtg
300
gctgggtccc tgcagaagag cacagaagtg atgaaggcca tgcaaagtct tgtgaagatt
360
ccagagattc aggccaccat gagggagttg tccaaagaaa tgatgaaggc tgggatcata
420
gaggagatgt tagaggacac ttttgaaagc atggacgata aggaagaaat ggaggaagaa
480
gcagaaatgg aaattgacag aattctcttt gaaattacag caggggcctt gggcaaagca
540
cccagtaaag tgactgatgc cttccagag ccagaacctc caggagcgat ggctgcctca
600
gaggatgagg aggaggagga agaggctctg gagggcatgc agtcccggct ggccacactc
660
cgcagctagg ggctgcctac cccgctgggt gtgcacacac tcctctcaag agctgccatt
720
ttatgtgtct cttgcactac acctctgttg tgaggactac ctttttgag aaggttctgt
780
ttgtctcttt tcattctctg cccaggtttt gggatcgcaa agggattgtt cttataaaag
840
tggcataaat aaatgcatca tttttaggag tatagacaga tatatcttat tgtggggagg
900

ggaaagaaat ccattctgctc atgaagcact tctgaaaata taggtgattg cctgaatgtc
960
gaagactcta cttttgtcta taaaacacta tataaatgaa ttttaataaa tttttgcttc
1020
agcacttggc cccattgtag attgccctgt gcagtaaact ttcaagggtg cagctgcccc
1080
agattgcttc atttgctggg tgtggaaaga gttgctatgg ccaggcatat gggatttgga
1140
agctcagcag aagtgacttc tgctctgtgg ttgctgctcc ccggctttca cagacatggt
1200
atggcagcca ttcttttatc tatttaacca agaggatgct ggggaattgt gctgcttgct
1260
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1288

<210> 5964

<211> 222

<212> PRT

<213> Homo sapiens

<400> 5964

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			20					25					30		
Gln	Ile	Arg	Asp	Ile	Gln	Arg	Glu	Glu	Lys	Val	Lys	Arg	Ser	Val	
		35					40					45			
Lys	Asp	Ala	Ala	Lys	Lys	Gly	Gln	Lys	Asp	Val	Cys	Ile	Val	Leu	Ala
	50					55				60					
Lys	Glu	Met	Ile	Arg	Ser	Arg	Lys	Ala	Val	Ser	Lys	Leu	Tyr	Ala	Ser
65					70					75				80	
Lys	Ala	His	Met	Asn	Ser	Val	Leu	Met	Gly	Met	Lys	Asn	Gln	Leu	Ala
			85						90				95		
Val	Leu	Arg	Val	Ala	Gly	Ser	Leu	Gln	Lys	Ser	Thr	Glu	Val	Met	Lys
			100						105				110		
Ala	Met	Gln	Ser	Leu	Val	Lys	Ile	Pro	Glu	Ile	Gln	Ala	Thr	Met	Arg
		115					120					125			
Glu	Leu	Ser	Lys	Glu	Met	Met	Lys	Ala	Gly	Ile	Ile	Glu	Glu	Met	Leu
	130						135					140			
Glu	Asp	Thr	Phe	Glu	Ser	Met	Asp	Asp	Gln	Glu	Glu	Met	Glu	Glu	Glu
145					150				155					160	
Ala	Glu	Met	Glu	Ile	Asp	Arg	Ile	Leu	Phe	Glu	Ile	Thr	Ala	Gly	Ala
			165						170					175	
Leu	Gly	Lys	Ala	Pro	Ser	Lys	Val	Thr	Asp	Ala	Leu	Pro	Glu	Pro	Glu
			180						185				190		
Pro	Pro	Gly	Ala	Met	Ala	Ala	Ser	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Glu
		195					200					205			
Ala	Leu	Glu	Ala	Met	Gln	Ser	Arg	Leu	Ala	Thr	Leu	Arg	Ser		
	210						215					220			

<210> 5965

<211> 1011

<212> DNA

<213> Homo sapiens

<400> 5965

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120
agatgcctgg agagaatgag aaacagccgg gacaggctcc taaacaggta ccgccaggct
180
ggaagcagtg ggccaggga ttctcagaac agctttctag ttcaagaggt gatggaagaa
240
gagtggaaatg ctttgcagnn tcagtgnag aattgtccag aagacttggc tcagttggag
300
gagctgatag acatggctgt gctggaggaa attcaacagg agctgatcaa ccaagagcag
360
tccatcatca gcgagtatga gaagagcttg cagtttgatg aaaagtgtct cagcatcatg
420
ctggctgagt gggaggcaaa cccactcatc tgtcctgtat gtacaaagta caacctgaga
480
atcacaagcg gtgtgggtgt gtgtcagtgt ggcctgtcca tcccatctca ttcttctgag
540
ttgacagagc agaagcttcg tgctgttta gagggtagta taaatgagca cagtgcacat
600
tgtccccaca cacctgaatt ttcagtcact ggaggaacag aagaaaagtc cagtcttctc
660
atgagctgtc tggcctgtga tacttgggct gtgacctct agagccagct tggactcaca
720
tcattctatg gggttgaaga caactcattc cctctgagga gccttgtaca tacaagcctt
780
ttatttataa cttattttgt attgaaactt ttaaacaata ctgaagaaaa aaaaactttt
840
ccgacatctg ttcttggctt tttgtgacgc aggttgaagg gggaggaata gaaaaagaca
900
aactgccttg gaggagataa accaatttta tgtctatcat gttatacaaa aatctagaaa
960
taatagattt gtacagaaaa aaatgataat aaatgagaac acaaaacata t
1011

<210> 5966

<211> 233

<212> PRT

<213> Homo sapiens

<400> 5966

Gly Asn Gly Ser Cys Gly Phe Val Ser Arg Glu Glu Glu Met Ala Glu
1 5 10 15
Ser Leu Arg Ser Pro Arg Arg Ser Leu Tyr Lys Leu Val Gly Ser Pro
20 25 30
Pro Trp Lys Glu Ala Phe Arg Gln Arg Cys Leu Glu Arg Met Arg Asn
35 40 45
Ser Arg Asp Arg Leu Leu Asn Arg Tyr Arg Gln Ala Gly Ser Ser Gly
50 55 60
Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln Glu Val Met Glu Glu
65 70 75 80
Glu Trp Asn Ala Leu Gln Xaa Gln Trp Xaa Asn Cys Pro Glu Asp Leu

	85		90		95										
Ala	Gln	Leu	Glu	Glu	Leu	Ile	Asp	Met	Ala	Val	Leu	Glu	Glu	Ile	Gln
	100						105					110			
Gln	Glu	Leu	Ile	Asn	Gln	Glu	Gln	Ser	Ile	Ile	Ser	Glu	Tyr	Glu	Lys
	115						120					125			
Ser	Leu	Gln	Phe	Asp	Glu	Lys	Cys	Leu	Ser	Ile	Met	Leu	Ala	Glu	Trp
	130						135				140				
Glu	Ala	Asn	Pro	Leu	Ile	Cys	Pro	Val	Cys	Thr	Lys	Tyr	Asn	Leu	Arg
145					150				155					160	
Ile	Thr	Ser	Gly	Val	Val	Val	Cys	Gln	Cys	Gly	Leu	Ser	Ile	Pro	Ser
			165				170						175		
His	Ser	Ser	Glu	Leu	Thr	Glu	Gln	Lys	Leu	Arg	Ala	Cys	Leu	Glu	Gly
			180				185						190		
Ser	Ile	Asn	Glu	His	Ser	Ala	His	Cys	Pro	His	Thr	Pro	Glu	Phe	Ser
	195						200					205			
Val	Thr	Gly	Gly	Thr	Glu	Glu	Lys	Ser	Ser	Leu	Leu	Met	Ser	Cys	Leu
	210						215				220				
Ala	Cys	Asp	Thr	Trp	Ala	Val	Ile	Leu							
225							230								

<210> 5967

<211> 1806

<212> DNA

<213> Homo sapiens

<400> 5967

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 120
 tgtgcttttg ttgctaggca gtcaacagca gggctactaa agcacttcta atttagacaa
 180
 atcttttcct ctattttaga aatggatttc aatgggtgttc agtttgtttg cagaaaccta
 240
 ctgaaagtga gcatgttttt gaacacatta acaccgaagt tctacgtggc cctaacaggc
 300
 acttcctcac taatatcagg gcttattttg atatttgaat ggtgggtattt tcgcaaatac
 360
 ggaacttcac tcattgaaca agtctcagta agccacttgc gcccccttct gggagggggt
 420
 gacaacaact ctccaacaa ttctaattcc agtaacgggg actcagatc caataggcaa
 480
 agtgtctcag aatgcaaagt atggcgaaat ccactaaatt tatttagggg tgctgaatac
 540
 aatcggtata cttgggtgac aggacgagag cctcttactt actatgacat gaatctctct
 600
 gccaagacc accagacatt ctttacttgt gactcggacc atctgcgtcc cgcagatgca
 660
 ataatgcaga aagcctggag agagagaaac cccaagcta ggatttctgc agctcatgaa
 720
 gccttgagga taaatgagac gagacaccaa tgtcttggtg tacatcaaaa gaaggctagc
 780
 aatgtgtgcc agaagactcg ggaggaccag ggaagcaaag cccttctgga actacaagca
 840

tatgctgatg ttcaggcagt cttagcaaag tatgatgata taagcttacc aaagtcagca
900
acaatatgct acacagctgc tttgctcaaa gcaagagctg tctctgacaa attctctcct
960
gaggctgcat ctggcgggg gctgagcaca gcagagatga atgcagtaga ggccattcat
1020
agagctgtgg aattcaatcc tcatgtgcca aaatacctac tagaaatgaa aagcttaate
1080
ctacccccag aacatatacct gaagagagga gacagtgaag caatagcata tgcattcttt
1140
catcttgacac actggaagag agtgggaagg gctttgaatc ttttgattg tacgtgggaa
1200
ggcacttttc ggatgatccc ttatcccttg gaaaaggggc acctatttta tccttaccca
1260
atctgtacag aaacagcaga ccgagagctg cttccatctt tccatgaagt ctcagtttac
1320
ccaaagaagg agcttccctt ctttattctc tttactgctg gattatgttc cttcacagcc
1380
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1440
agtgtttgcc tagaggagg ccttggggaa tggatgggga aagccaaggg cataaaagca
1500
gctgtgagaga aatgggggtg ccttacagaa atgggtacga gcctgcaaag atcattgctc
1560
accatttaat tttcatgatc gtcaatggaa tcaaagcatt aagggtcaaa tgagaaagt
1620
caggttggtta ctgcatgcct tgccctcattt cacaacaaat tcttagcagt ttccaaaaa
1680
tgcaggaggt ccaaaaggat ggaatgattt aggaatcct agcaaatgaa aatgtgtggg
1740
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1800
ctttcc
1806

<210> 5968

<211> 434

<212> PRT

<213> Homo sapiens

<400> 5968

Met	Asp	Phe	Asn	Gly	Val	Gln	Phe	Val	Cys	Arg	Asn	Leu	Leu	Lys	Val
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Ser	Met	Phe	Leu	Asn	Thr	Leu	Thr	Pro	Lys	Phe	Tyr	Val	Ala	Leu	Thr
			20					25					30		
Gly	Thr	Ser	Ser	Leu	Ile	Ser	Gly	Leu	Ile	Leu	Ile	Phe	Glu	Trp	Trp
			35				40					45			
Tyr	Phe	Arg	Lys	Tyr	Gly	Thr	Ser	Phe	Ile	Glu	Gln	Val	Ser	Val	Ser
			50			55					60				
His	Leu	Arg	Pro	Leu	Leu	Gly	Gly	Val	Asp	Asn	Asn	Ser	Ser	Asn	Asn
65					70				75					80	
Ser	Asn	Ser	Ser	Asn	Gly	Asp	Ser	Asp	Ser	Asn	Arg	Gln	Ser	Val	Ser
				85					90					95	
Glu	Cys	Lys	Val	Trp	Arg	Asn	Pro	Leu	Asn	Leu	Phe	Arg	Gly	Ala	Glu

100 105 110
Tyr Asn Arg Tyr Thr Trp Val Thr Gly Arg Glu Pro Leu Thr Tyr Tyr
115 120 125
Asp Met Asn Leu Ser Ala Gln Asp His Gln Thr Phe Phe Thr Cys Asp
130 135 140
Ser Asp His Leu Arg Pro Ala Asp Ala Ile Met Gln Lys Ala Trp Arg
145 150 155 160
Glu Arg Asn Pro Gln Ala Arg Ile Ser Ala Ala His Glu Ala Leu Glu
165 170 175
Ile Asn Glu Thr Arg His Gln Cys Leu Gly Val His Gln Lys Lys Ala
180 185 190
Ser Asn Val Cys Gln Lys Thr Arg Glu Asp Gln Gly Ser Lys Ala Leu
195 200 205
Leu Glu Leu Gln Ala Tyr Ala Asp Val Gln Ala Val Leu Ala Lys Tyr
210 215 220
Asp Asp Ile Ser Leu Pro Lys Ser Ala Thr Ile Cys Tyr Thr Ala Ala
225 230 235 240
Leu Leu Lys Ala Arg Ala Val Ser Asp Lys Phe Ser Pro Glu Ala Ala
245 250 255
Ser Arg Arg Gly Leu Ser Thr Ala Glu Met Asn Ala Val Glu Ala Ile
260 265 270
His Arg Ala Val Glu Phe Asn Pro His Val Pro Lys Tyr Leu Leu Glu
275 280 285
Met Lys Ser Leu Ile Leu Pro Pro Glu His Ile Leu Lys Arg Gly Asp
290 295 300
Ser Glu Ala Ile Ala Tyr Ala Phe Phe His Leu Ala His Trp Lys Arg
305 310 315 320
Val Glu Gly Ala Leu Asn Leu Leu His Cys Thr Trp Glu Gly Thr Phe
325 330 335
Arg Met Ile Pro Tyr Pro Leu Glu Lys Gly His Leu Phe Tyr Pro Tyr
340 345 350
Pro Ile Cys Thr Glu Thr Ala Asp Arg Glu Leu Leu Pro Ser Phe His
355 360 365
Glu Val Ser Val Tyr Pro Lys Lys Glu Leu Pro Phe Phe Ile Leu Phe
370 375 380
Thr Ala Gly Leu Cys Ser Phe Thr Ala Met Leu Ala Leu Leu Thr His
385 390 395 400
Gln Phe Pro Glu Leu Met Gly Val Phe Ala Lys Ala Val Ser Val Cys
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<210> 5969

<211> 429

<212> DNA

<213> Homo sapiens

<400> 5969

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120

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240
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429

<210> 5970
<211> 143
<212> PRT
<213> Homo sapiens

<400> 5970
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Gly Val Leu Ala Ser Gln Ala Met Ile Glu Lys Ile Leu Ser Glu Asp
35 40 45
Pro Arg Trp Gln Asp Ala Asn Phe Val Leu Gly Ser Tyr Lys Thr Glu
50 55 60
Gln Cys Pro Lys Pro Pro Arg Leu Cys Arg Gln Gly Tyr Ala Cys Pro
65 70 75 80
His Tyr His Asn Ser Arg Asp Arg Arg Arg Asn Pro Arg Arg Phe Gln
85 90 95
Tyr Arg Ser Thr Pro Cys Pro Ser Val Lys His Gly Asp Glu Trp Gly
100 105 110
Glu Pro Ser Arg Cys Asp Gly Gly Asp Gly Cys Gln Tyr Cys His Ser
115 120 125
Arg Thr Glu Gln Gln Phe His Pro Glu Ile Tyr Lys Ser Thr Lys
130 135 140

<210> 5971
<211> 565
<212> DNA
<213> Homo sapiens

<400> 5971
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420
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<210> 5972
<211> 104
<212> PRT
<213> Homo sapiens

<400> 5972
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Cys Pro Asn Arg Gln His Pro Tyr Phe Ile Asp Gly His Pro His Phe
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Arg Asp Ser Ser Leu Leu Tyr Pro His Phe Thr Gly Glu Gly Ile Glu
35 40 45
Ala Gln Lys Val Arg Ser Leu Leu Gln Asp Asp Gln Leu Asn Gln Asn
50 55 60
Phe Arg Ala Ser Asn Thr Lys Cys Val Pro Leu Ser Ser Val Ser His
65 70 75 80
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85 90 95
Pro Pro Thr Leu Leu Pro Ala Ser
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<210> 5973
<211> 797
<212> DNA
<213> Homo sapiens

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240
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660
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<210> 5974
<211> 107
<212> PRT
<213> Homo sapiens

<400> 5974
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His Pro Gly Pro Ser Leu Thr Ser Gly Ala Leu Thr His Ile Arg Asp
35 40 45
Pro His Pro Gly Leu Ser Pro Thr Ser Gly Thr Leu Met Pro Gly Arg
50 55 60
Arg Arg Gly Gly Pro Ser Phe Gly Thr Pro Ala Leu Arg Arg Arg Lys
65 70 75 80
Cys His Arg Glu Ala Pro Ala Ser Gly Leu Ser Thr Ala Ala Arg Glu
85 90 95
Arg Leu Trp Trp Pro Arg Ala Arg Val Cys Arg
100 105

<210> 5975
<211> 2175
<212> DNA
<213> Homo sapiens

<400> 5975
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aagcaggacc ttgcttatga acgtcagtat gaacagcaaa cctatcaggt gatccctgag
420

gtgatcaaaa acttcatcca gtatttccac aaaactgtct cagatttgat tgaccagaaa
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1320
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1380
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2175

<210> 5976
<211> 564
<212> PRT
<213> Homo sapiens

<400> 5976
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Tyr Ala Tyr Pro Ser Asp Tyr Asp Met His Thr Gly Asp Pro Lys Gln
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Asp Leu Ala Tyr Glu Arg Gln Tyr Glu Gln Gln Thr Tyr Gln Val Ile
35 40 45
Pro Glu Val Ile Lys Asn Phe Ile Gln Tyr Phe His Lys Thr Val Ser
50 55 60
Asp Leu Ile Asp Gln Lys Val Tyr Glu Leu Gln Ala Ser Arg Val Ser
65 70 75 80
Ser Asp Val Ile Asp Gln Lys Val Tyr Glu Ile Gln Asp Ile Tyr Glu
85 90 95
Asn Ser Trp Thr Lys Leu Thr Glu Arg Phe Phe Lys Asn Thr Pro Trp
100 105 110
Pro Glu Ala Glu Ala Ile Ala Pro Gln Val Gly Asn Asp Ala Val Phe
115 120 125
Leu Ile Leu Tyr Lys Glu Leu Tyr Tyr Arg His Ile Tyr Ala Lys Val
130 135 140
Ser Gly Gly Pro Ser Leu Glu Gln Arg Phe Glu Ser Tyr Tyr Asn Tyr
145 150 155 160
Cys Asn Leu Phe Asn Tyr Ile Leu Asn Ala Asp Gly Pro Ala Pro Leu
165 170 175
Glu Leu Pro Asn Gln Trp Leu Trp Asp Ile Ile Asp Glu Phe Ile Tyr
180 185 190
Gln Phe Gln Ser Phe Ser Gln Tyr Arg Cys Lys Thr Ala Lys Lys Ser
195 200 205
Glu Glu Glu Ile Asp Phe Leu Arg Ser Asn Pro Lys Ile Trp Asn Val
210 215 220
His Ser Val Leu Asn Val Leu His Ser Leu Val Asp Lys Ser Asn Ile
225 230 235 240
Asn Arg Gln Leu Glu Val Tyr Thr Ser Gly Gly Asp Pro Glu Ser Val
245 250 255
Ala Gly Glu Tyr Gly Arg His Ser Leu Tyr Lys Met Leu Gly Tyr Phe
260 265 270
Ser Leu Val Gly Leu Leu Arg Leu His Ser Leu Leu Gly Asp Tyr Tyr
275 280 285
Gln Ala Ile Lys Val Leu Glu Asn Ile Glu Leu Asn Lys Lys Ser Met
290 295 300
Tyr Ser Arg Val Pro Glu Cys Gln Val Thr Thr Tyr Tyr Tyr Val Gly
305 310 315 320
Phe Ala Tyr Leu Met Met Arg Arg Tyr Gln Asp Ala Ile Arg Val Phe

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      325      330      335
Ala Asn Ile Leu Leu Tyr Ile Gln Arg Thr Lys Ser Met Phe Gln Arg
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Thr Thr Tyr Lys Tyr Glu Met Ile Asn Lys Gln Asn Glu Gln Met His
      355      360      365
Ala Leu Leu Ala Ile Ala Leu Thr Met Tyr Pro Met Arg Ile Asp Glu
      370      375      380
Ser Ile His Leu Gln Leu Arg Glu Lys Tyr Gly Asp Lys Met Leu Arg
385      390      395      400
Met Gln Lys Gly Asp Pro Gln Val Tyr Glu Glu Leu Phe Ser Tyr Ser
      405      410      415
Cys Pro Lys Phe Leu Ser Pro Val Val Pro Asn Tyr Asp Asn Val His
      420      425      430
Pro Asn Tyr His Lys Glu Pro Phe Leu Gln Gln Leu Lys Val Phe Ser
      435      440      445
Asp Glu Val Gln Gln Gln Ala Gln Leu Ser Thr Ile Arg Ser Phe Leu
      450      455      460
Lys Leu Tyr Thr Thr Met Pro Val Ala Lys Leu Ala Gly Phe Leu Asp
465      470      475      480
Leu Thr Glu Gln Glu Phe Arg Ile Gln Leu Leu Val Phe Lys His Lys
      485      490      495
Met Lys Asn Leu Val Trp Thr Ser Gly Ile Ser Ala Leu Asp Gly Glu
      500      505      510
Phe Gln Ser Ala Ser Glu Val Asp Phe Tyr Ile Asp Lys Asp Met Ile
      515      520      525
His Ile Ala Asp Thr Lys Val Ala Arg Arg Tyr Gly Asp Phe Phe Ile
      530      535      540
Arg Gln Ile His Lys Phe Glu Glu Leu Asn Arg Thr Leu Lys Lys Met
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Gly Gln Arg Pro

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<210> 5977
 <211> 2320
 <212> DNA
 <213> Homo sapiens

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<400> 5977
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caagtatacc accatcacac agaaatttta ttttttattt tattttttat agagacaggg
240
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420
tcaaaaaaca cgttaaattt aagcagaata aggctggggt cggtggctca tgctgtgat
480

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<210> 5978
<211> 77
<212> PRT
<213> Homo sapiens

<400> 5978
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Ile Arg Leu Gly Ser Val Ala His Ala Cys Asp Pro Ser Thr Leu Gly
20 25 30
Gly Arg Gly Gly Gln Ile Ile Xaa Ala Arg Ser Ser Arg Pro Ala Trp
35 40 45
Thr Thr Trp Arg Xaa Val Phe Thr Lys Asn Thr Lys Ile Ser Trp Ala
50 55 60
Trp Trp Tyr Thr Pro Val Ile Pro Ala Thr Gln Glu Ala
65 70 75

<210> 5979
<211> 1095
<212> DNA
<213> Homo sapiens

<400> 5979
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aaaaaaaaaa aaaaa
1095

<210> 5980
<211> 169
<212> PRT
<213> Homo sapiens

<400> 5980
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20 25 30
Ser Gly Gln Glu Asp Tyr Asp Arg Leu Arg Pro Leu Ser Tyr Gln Asn
35 40 45
Thr His Leu Val Leu Ile Cys Tyr Asp Val Met Asn Pro Thr Ser Tyr
50 55 60
Asp Asn Val Leu Ile Lys Trp Phe Pro Glu Val Thr His Phe Cys Arg
65 70 75 80
Gly Ile Pro Met Val Leu Ile Gly Cys Lys Thr Asp Leu Arg Lys Asp
85 90 95
Lys Glu Gln Leu Arg Lys Leu Arg Ala Ala Gln Leu Glu Pro Ile Thr
100 105 110
Tyr Met Gln Gly Leu Ser Ala Cys Glu Gln Ile Arg Ala Ala Leu Tyr
115 120 125
Leu Glu Cys Ser Ala Lys Phe Arg Glu Asn Val Glu Asp Val Phe Arg
130 135 140
Glu Ala Ala Lys Val Ala Leu Ser Ala Leu Lys Lys Ala Gln Arg Gln
145 150 155 160
Lys Lys Arg Arg Leu Cys Leu Leu Leu
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<210> 5981
<211> 677
<212> DNA
<213> Homo sapiens

<400> 5981
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<210> 5982
<211> 98
<212> PRT
<213> Homo sapiens

<400> 5982
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Pro Arg Ala Pro Leu Pro Arg Ser Ser Ala Arg Arg Pro Ser Lys Ala
35 40 45
Asn Leu His Thr Leu Gly Gln Leu Lys Leu Ser Arg Arg Cys Arg Glu
50 55 60
Pro Arg Leu Gly Arg Ala Gly Gln Gln Arg Leu His Pro Arg Thr Arg
65 70 75 80
Pro Arg Arg Gly Ser Gly Pro Leu Val Arg Ala Gly Arg Arg Gly Trp
85 90 95
Gly Lys

<210> 5983
<211> 790
<212> DNA
<213> Homo sapiens

<400> 5983
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tatagtcaag aggtaagaag ttaacttaaa aagggtgaat tggtagtttt tttcctatta
120

cattgttttc cttaaattac tggtaaattt tgaataaac agtccaaga tgtgattatt
180
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<210> 5984

<211> 186

<212> PRT

<213> Homo sapiens

<400> 5984

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Gln	Leu	Gly	Leu	Asp	Ala	Val	Glu	Pro	Thr	Ala	Leu	His	Lys	Thr	Leu
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<211> 737

<212> DNA

<213> Homo sapiens

<400> 5985

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<213> Homo sapiens

<400> 5986

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5158

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<210> 5987

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<212> DNA

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Trp Ile Lys Ala Arg Ser Gly Asp Asn Pro Val Tyr Ile Trp Gly His
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Ser Leu Gly Thr Gly Val Ala Thr Ile Trp Cys Gly Ala Ser Val Ser
65 70 75 80
Glu Thr Pro Pro Asp Ala Leu Ile Leu Glu Ser Pro Phe Thr Asn Ile
85 90 95
Arg Glu Glu Ala Lys Ser His Pro Phe Ser Val Ile Tyr Arg Tyr Phe
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Pro Gly Phe Asp Trp Phe Phe Leu Asp Pro Ile Thr Ser Ser Gly Ile
115 120 125
Lys Phe Ala Asn Asp Glu Asn Val Lys His Ile Ser Cys Pro Leu Leu
130 135 140
Ile Leu His Ala Glu Asp Asp Pro Val Val Pro Phe Gln Leu Gly Arg
145 150 155 160
Lys Leu Tyr Ser Ile Ala Ala Pro Ala Arg Ser Phe Arg Asp Phe Lys
165 170 175
Val Gln Phe Val Pro Phe His Ser Asp Leu Gly Tyr Arg His Lys Tyr
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<400> 5989

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 35 40 45
 Val Asn Thr His Val Trp Thr Lys Ser Lys Phe Met Gly Met Ser Val
 50 55 60
 Gly Val Ser Met Ile Gly Glu Gly Val Leu Arg Leu Leu Glu His Gly
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 Glu Glu Tyr Val Phe Thr Leu Pro Ser Ala Tyr Ala Arg Ser Ile Leu
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 Lys Thr Gly Tyr Ser Ala Thr Val Ile Phe His Thr Lys Pro Phe Tyr
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 Pro Val Tyr Pro Lys Lys Ile Arg Pro Leu Glu Lys Gln Gly Pro Met
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 Glu Ser Arg Asn Leu Trp Arg Glu Val Thr Arg Tyr Leu Arg Leu Gly
 195 200 205
 Asp Ile Asp Ala Ala Thr Glu Gln Lys Arg His Leu Glu Glu Lys Gln
 210 215 220
 Arg Val Glu Glu Arg Lys Arg Glu Asn Leu Arg Thr Pro Trp Lys Pro
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<211> 301

<212> PRT

<213> Homo sapiens

<400> 5992

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<211> 7858

<212> DNA

<213> Homo sapiens

<400> 5993

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<211> 757

<212> PRT

<213> Homo sapiens

<400> 6000

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Lys	Glu	Lys	Met	Phe	Thr	Ile	Leu	Glu	Arg	Thr	Val	Thr	Thr	Arg	Ile
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Thr Trp Val Leu Asn Thr	Tyr Thr Ser Thr Glu	Met Met Arg Asn Val
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Glu Leu Ala Pro Glu Val	Asp Val Gly Thr Leu	Glu Pro Leu Leu Ser
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Ser Asn Ile Ile Ala Trp	Leu Arg Lys Ala Leu	Glu Thr Asp Lys Lys
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Ala Gln Leu Tyr Lys Glu	Glu His Leu Arg Asn	Arg Gln His Pro His
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Cys Tyr Val Gln Tyr Met	Ile Ala Ile Ile Asn	Asn Cys Gln Thr Phe
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Glu Ala His Arg Arg Val	Val Val Val Glu Tyr	Leu Arg Ala Val Met
610	615	620
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625	630	635
Lys Met Val Arg Glu Ala	Glu Gln Arg Arg Phe	Leu Phe Arg Lys Leu
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Ala Ser Gly Phe Gly Glu	Asp Val Asp Gly Tyr	Cys Asp Thr Ile Val
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Ala Val Ala Glu Val Ile	Lys Leu Thr Asp Pro	Ser Leu Leu Tyr Leu
675	680	685
Glu Val Ser Thr Leu Val	Ser Lys Tyr Pro Asp	Ile Arg Asp Asp His
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Ile Gly Ala Leu Leu Ala	Val Arg Gly Asp Ala	Ser Arg Asp Met Lys

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<213> Homo sapiens

<400> 6002
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Trp Cys Tyr Val Ser Gly Glu Ala Gly Val Pro Glu Lys Arg Pro Cys
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Glu Asp Leu Arg Cys Pro Glu Thr Thr Ser Gln Ala Leu Pro Ala Phe
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115 120 125
Gln Val Phe Ala Pro Ala Asn Ala Leu Pro Ala Arg Ser Glu Ala Ala
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145 150 155 160
Lys Glu Lys Lys Asp Leu Gly Thr Leu Gly Tyr Val Leu Gly Ile Thr
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Ser Tyr Lys Arg Gly Lys Asp Leu Lys Glu Gln His Asp Gln Lys Val
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Cys Glu Arg Glu Met Gln Arg Ile Thr Leu Pro Leu Ser Ala Phe Thr
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<210> 6003

<211> 3107

<212> DNA

<213> Homo sapiens

<400> 6003

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<211> 140

<212> PRT

<213> Homo sapiens

<400> 6004

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Pro	Ala	Val	Pro	Lys	Val	Ala	Pro	Gly	Thr	Met	Pro	Thr	Arg	Pro	Glu
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Ala	Leu	Pro	Xaa	Arg	Gly	Ser	Pro	Arg	Gly	Pro	Gly	Pro	Arg	Ala	Pro
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Pro	Leu	Ser	Ser	Ala	Phe
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 <212> DNA
 <213> Homo sapiens

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<210> 6006

<211> 200

<212> PRT

<213> Homo sapiens

<400> 6006

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		20					25					30			
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Leu	Lys	Gly	Glu	Lys	Gly	Glu	Ser	Ala	Ser	Gln	Pro	Thr	Gly	Glu	Pro
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Gly	Ser	Ala	His	Ser	Glu	Pro	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Pro	Pro
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Gly	Pro	Met	Gly	Leu	Gln	Gly	Ile	Gln	Gly	Pro	Lys	Gly	Leu	Asp	Gly
		85					90						95		
Ala	Lys	Gly	Glu	Lys	Gly	Ala	Ser	Gly	Glu	Arg	Gly	Ser	Ser	Gly	Leu
	100						105					110			
Pro	Gly	Pro	Val	Gly	Pro	Pro	Gly	Leu	Ile	Gly	Leu	Pro	Gly	Thr	Lys
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Pro	Arg	Gly	Glu	Lys	Gly	Asp	Arg	Ser	Glu	Arg	Gly	Glu	Lys	Gly	Glu
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		165					170					175			
Gly	Pro	Pro	Gly	Leu	Asp	Gln	Pro	Cys	Pro	Val	Gly	Pro	Asp	Gly	Leu
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<210> 6007

<211> 693

<212> DNA

<213> Homo sapiens

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120
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180
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240
gacttgaca agttggtaga caattgggcc cgagatgcca tgaatctctc aggcaggaga
300
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360
gggcaactgt gcatctccat gacctcgaac ctgggtggct ctgcccccat ctctgcagca
420
tcagctacct ctctaggtca cttaccaag tctatgtgcc cccacagca gtatggcttt
480
ccagctaccc catttggcgc tcaatggagt gggacgggtg gccagcacc acagccactt
540
ggccagttec aacctgtggg aactgcctcc ttgcagaatt tcaacatcag caatttgag
600
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693

<210> 6008
<211> 214
<212> PRT
<213> Homo sapiens

<400> 6008
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20 25 30
Gly Lys Met Val Lys Lys Val Cys Pro Cys Asn Gln Leu Cys Arg Thr
35 40 45
Ser Ser Thr Asn Thr Val Gly Ala Thr Val Asn Ser Gln Ala Ala Gln
50 55 60
Ala Gln Pro Pro Ala Met Thr Ser Ser Arg Lys Gly Thr Phe Thr Asp
65 70 75 80
Asp Leu His Lys Leu Val Asp Asn Trp Ala Arg Asp Ala Met Asn Leu
85 90 95
Ser Gly Arg Arg Gly Ser Lys Gly His Met Asn Tyr Glu Gly Pro Gly
100 105 110
Met Ala Arg Lys Phe Ser Ala Pro Gly Gln Leu Cys Ile Ser Met Thr
115 120 125
Ser Asn Leu Gly Gly Ser Ala Pro Ile Ser Ala Ala Ser Ala Thr Ser
130 135 140
Leu Gly His Phe Thr Lys Ser Met Cys Pro Pro Gln Gln Tyr Gly Phe
145 150 155 160
Pro Ala Thr Pro Phe Gly Ala Gln Trp Ser Gly Thr Gly Gly Pro Ala

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<210> 6009
<211> 1570
<212> DNA
<213> Homo sapiens
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180					
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240					
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360					
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420					
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600					
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660					
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1140					
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1260
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1380
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1570

<210> 6010
<211> 468
<212> PRT
<213> Homo sapiens

<400> 6010
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His Ser Gly Pro Leu Ala Val Leu Ala Gln Val Val Arg Arg Ser Thr
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Asp Thr Val Tyr Asp Val Val Val Ser Gly Gly Gly Leu Val Gly Ala
35 40 45
Ala Met Ala Cys Ala Leu Gly Tyr Asp Ile His Phe His Asp Lys Lys
50 55 60
Ile Leu Leu Leu Glu Ala Gly Pro Lys Lys Val Leu Glu Lys Leu Ser
65 70 75 80
Glu Thr Tyr Ser Asn Arg Val Ser Ser Ile Ser Pro Gly Ser Ala Thr
85 90 95
Leu Leu Ser Ser Phe Gly Ala Trp Asp His Ile Cys Asn Met Arg Tyr
100 105 110
Arg Ala Phe Arg Arg Met Gln Val Trp Asp Ala Cys Ser Glu Ala Leu
115 120 125
Ile Met Phe Asp Lys Asp Asn Leu Asp Asp Met Gly Tyr Ile Val Glu
130 135 140
Asn Asp Val Ile Met His Ala Leu Thr Lys Gln Leu Glu Ala Val Ser
145 150 155 160
Asp Arg Val Thr Val Leu Tyr Arg Ser Lys Ala Ile Arg Tyr Thr Trp
165 170 175
Pro Cys Pro Phe Pro Met Ala Asp Ser Ser Pro Trp Val His Ile Thr
180 185 190
Leu Gly Asp Gly Ser Thr Phe Gln Thr Lys Leu Leu Ile Gly Ala Asp
195 200 205
Gly His Asn Ser Gly Val Arg Gln Ala Val Gly Ile Gln Asn Val Ser
210 215 220
Trp Asn Tyr Asp Gln Ser Ala Val Val Ala Thr Leu His Leu Ser Glu
225 230 235 240
Ala Thr Glu Asn Asn Val Ala Trp Gln Arg Phe Leu Pro Ser Gly Pro
245 250 255
Ile Ala Leu Leu Pro Leu Ser Asp Thr Leu Ser Ser Leu Val Trp Ser

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Thr Ser His Glu His Ala Ala Glu Leu Val Ser Met Asp Glu Glu Lys
      275      280      285
Phe Val Asp Ala Val Asn Ser Ala Phe Trp Ser Asp Ala Asp His Thr
      290      295      300
Asp Phe Ile Asp Thr Ala Gly Ala Met Leu Gln Tyr Pro Val Ser Leu
305      310      315      320
Leu Lys Pro Thr Lys Val Ser Ala Arg Gln Leu Pro Pro Ser Val Pro
      325      330      335
Trp Val Asp Ala Lys Ser Arg Val Leu Phe Pro Leu Gly Leu Gly His
      340      345      350
Ala Ala Glu Tyr Val Arg Pro Arg Val Ala Leu Ile Gly Asp Ala Ala
      355      360      365
His Arg Val His Pro Leu Ala Gly Gln Gly Val Asn Met Gly Phe Gly
      370      375      380
Asp Ile Ser Ser Leu Ala His His Leu Ser Thr Ala Ala Phe Asn Gly
385      390      395      400
Lys Asp Leu Gly Ser Val Ser His Leu Thr Gly Tyr Glu Thr Glu Arg
      405      410      415
Gln Arg His Asn Thr Ala Leu Leu Ala Ala Thr Asp Leu Leu Lys Arg
      420      425      430
Leu Tyr Ser Thr Ser Ala Ser Pro Leu Val Leu Leu Arg Thr Trp Gly
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<210> 6011

<211> 1331

<212> DNA

<213> Homo sapiens

<400> 6011

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480
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600

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1331

<210> 6012
<211> 219
<212> PRT
<213> Homo sapiens

<400> 6012
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Lys Glu Pro Gly Asp Ser Ala Gln Phe Thr Lys Ala Ile Ala Ile Ile
35 40 45
Phe Pro Phe Leu Tyr Leu Leu Glu Lys Val Glu Cys Thr Pro Ser Gln
50 55 60
Glu His Leu Lys His Gln Thr Val Tyr Arg Leu Leu Lys Cys Ala Pro
65 70 75 80
Arg Gly Lys Asn Gly Phe Thr Pro Leu His Met Ala Val Asp Lys Asp
85 90 95
Thr Thr Asn Val Gly Arg Tyr Pro Val Gly Arg Phe Pro Ser Leu His
100 105 110
Val Val Lys Val Leu Leu Asp Cys Gly Ala Asp Pro Asp Ser Arg Asp
115 120 125
Phe Asp Asn Asn Thr Pro Leu His Ile Ala Ala Gln Asn Asn Cys Pro
130 135 140
Ala Ile Met Asn Ala Leu Ile Glu Ala Gly Ala His Met Asp Ala Thr
145 150 155 160
Asn Ala Phe Lys Lys Thr Ala Tyr Glu Leu Leu Asp Glu Lys Leu Leu

				165					170					175	
Ala	Arg	Gly	Thr	Met	Gln	Pro	Phe	Asn	Tyr	Val	Thr	Leu	Gln	Cys	Leu
			180					185					190		
Ala	Ala	Arg	Ala	Leu	Asp	Lys	Asn	Lys	Ile	Pro	Tyr	Lys	Gly	Phe	Ile
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<210> 6013
<211> 2204
<212> DNA
<213> Homo sapiens
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<210> 6014

<211> 182

<212> PRT

<213> Homo sapiens

<400> 6014

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			20					25					30		
Val	Lys	His	Ala	Lys	Val	Tyr	Thr	Cys	Thr	Ile	Cys	Ser	Arg	Ala	Tyr
		35					40					45			
Thr	Ser	Glu	Thr	Tyr	Leu	Met	Lys	His	Met	Arg	Lys	His	Asn	Pro	Pro
		50				55					60				
Asp	Leu	Gln	Gln	Gln	Val	Gln	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Val	Ala
65					70				75					80	
Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala
			85				90						95		
Gln	Ala	Gln	Ala	Gln	Ala	Ser	Gln	Ala	Ser	Gln	Gln	Gln	Gln	Gln	Gln

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Pro Gly Ala Ala Pro Gln Gly Gly Gly Gly Asp Ser Asn Pro Asn
      130      135      140
Pro Pro Pro Gln Cys Ser Phe Asp Leu Thr Pro Tyr Lys Thr Ala Glu
145      150      155      160
His His Lys Asp Ile Cys Leu Thr Val Thr Thr Ser Thr Ile Gln Val
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Glu His Leu Ala Ser Ser
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<210> 6015
 <211> 612
 <212> DNA
 <213> Homo sapiens

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180
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480
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612

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<210> 6016
 <211> 99
 <212> PRT
 <213> Homo sapiens

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<400> 6016
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35      40      45
Leu Ser Met Ser Cys Asn Gln Asn Lys Leu Asp Ser Pro Gly Arg Ala

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Ser His Gly Ser Ser Leu Pro Phe Asn Gln Asp Ser Gln Lys Pro Ala		
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Gln Tyr Ile		95

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 <211> 2091
 <212> DNA
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<211> 537

<212> PRT

<213> Homo sapiens

<400> 6018

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Asn	Gly	Lys	Gly	Lys	Glu	Leu	Met	Trp	Asn	Phe	Arg	Glu	Leu	Ser	Glu
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Asn	Ser	Gln	Gln	Ala	Ala	Asn	Val	Leu	Ser	Gly	Ala	Cys	Gly	Leu	Gln
			50				55					60			
Arg	Gly	Asp	Arg	Val	Ala	Val	Met	Leu	Pro	Arg	Val	Pro	Glu	Trp	Trp
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Leu	Val	Ile	Leu	Gly	Cys	Ile	Arg	Ala	Gly	Leu	Ile	Phe	Met	Pro	Gly
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Thr	Ile	Gln	Met	Lys	Ser	Thr	Asp	Ile	Leu	Tyr	Arg	Leu	Gln	Met	Ser
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Lys	Ala	Lys	Ala	Ile	Val	Ala	Gly	Asp	Glu	Val	Ile	Gln	Glu	Val	Asp
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Thr	Val	Ala	Ser	Glu	Cys	Pro	Ser	Leu	Arg	Ile	Lys	Leu	Leu	Val	Ser

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Ala Ser Thr Thr His His Cys Val Glu Thr Gly Ser Gln Glu Ala Ser				
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Ala Ile Tyr Phe Thr Ser Gly Thr Ser Gly Leu Pro Lys Met Ala Glu				
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His Ser Tyr Ser Ser Leu Gly Leu Lys Ala Lys Met Asp Ala Gly Trp				
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Thr Gly Leu Gln Ala Ser Asp Ile Met Trp Thr Ile Ser Asp Thr Gly				
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Trp Ile Leu Asn Ile Leu Gly Ser Leu Leu Glu Ser Trp Thr Leu Gly				
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Ala Cys Thr Phe Val His Leu Leu Pro Lys Phe Asp Pro Leu Val Ile				
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Leu Lys Thr Leu Ser Ser Tyr Pro Ile Lys Ser Met Met Gly Ala Pro				
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Tyr Gly Gln Thr Glu Thr Gly Leu Thr Cys Met Val Ser Lys Thr Met				
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Gly Tyr Val Glu Asn Pro Asp Lys Thr Ala Ala Asn Ile Arg Gly Asp				
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Phe Trp Leu Leu Gly Asp Arg Gly Ile Lys Asp Glu Asp Gly Tyr Phe				
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Gln Phe Met Gly Arg Ala Asp Asp Ile Ile Asn Ser Ser Gly Tyr Arg				
	420		425	
Ile Gly Pro Ser Glu Val Glu Asn Ala Leu Met Lys His Pro Ala Val				
	435		440	
Val Glu Thr Ala Val Ile Ser Ser Pro Asp Pro Val Arg Gly Glu Val				
	450		455	
Val Lys Ala Phe Val Val Leu Ala Ser Gln Phe Leu Ser His Asp Pro				
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Glu Gln Leu Thr Lys Glu Leu Gln Gln His Val Lys Ser Val Thr Ala				
	485		490	
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<211> 3002

<212> DNA

<213> Homo sapiens

<400> 6019

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<211> 387
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 <213> Homo sapiens

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 His Pro Leu Phe Glu Gly Gly Ile Cys Ala Pro Cys Lys Asp Lys Phe
 65 70 75 80
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 Ser Ile Cys Cys Ser Gly Glu Thr Leu Leu Ile Cys Gly Asn Pro Asp
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 Cys Thr Arg Cys Tyr Cys Phe Glu Cys Val Asp Ser Leu Val Gly Pro
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 180 185 190
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<210> 6021

<211> 3145

<212> DNA

<213> Homo sapiens

<400> 6021

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<210> 6022
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<212> PRT
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<400> 6022
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Phe Phe Met Ser Pro Asn Asp Phe Val Thr Arg Tyr Leu Asn Ile Phe
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Glu His Ala Lys Gln Ala Phe Val Gln Arg Asp Asn Ala Arg Thr Gly
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Arg Val Thr Ala Ile Asp Phe Arg Asp Ile Met Val Thr Ile Arg Pro
210 215 220
His Val Leu Thr Pro Phe Val Glu Glu Cys Leu Val Ala Ala Ala Gly
225 230 235 240
Gly Thr Thr Ser His Gln Val Ser Phe Ser Tyr Phe Asn Gly Phe Asn
245 250 255
Ser Leu Leu Asn Asn Met Glu Leu Ile Arg Lys Ile Tyr Ser Thr Leu
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Ala Gly Thr Arg Lys Asp Val Glu Val Thr Lys Glu Glu Phe Val Leu
275 280 285
Ala Ala Gln Lys Phe Gly Gln Val Thr Pro Met Glu Val Asp Ile Leu
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Asp Ile Glu Arg Ile Ala Pro Leu Glu Glu Gly Thr Leu Pro Phe Asn

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Val Lys Thr Arg Met Gln Asn Gln Arg Ser Thr Gly Ser Phe Val Gly
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<211> 496

<212> PRT

<213> Homo sapiens

<400> 6026

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<211> 99

<212> PRT

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 6034

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2160
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2700
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3660
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3720
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3900
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3910

<210> 6038
<211> 214
<212> PRT
<213> Homo sapiens

<400> 6038
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1 5 10 15
Ile Thr Ala Leu Cys Thr Ala Leu Ala Glu Pro Ala Trp Leu His Ile
20 25 30
His Gly Gly Thr Cys Ser Arg Gln Glu Leu Gly Val Ser Asp Val Leu
35 40 45
Gly Tyr Val His Pro Asp Leu Leu Lys Asp Phe Cys Met Asn Pro Gln
50 55 60
Thr Val Leu Leu Leu Arg Val Ile Ala Ala Phe Cys Phe Leu Gly Ile
65 70 75 80
Leu Cys Ser Leu Ser Ala Phe Leu Leu Asp Val Phe Gly Pro Lys His
85 90 95
Pro Ala Leu Lys Ile Thr Arg Arg Tyr Ala Phe Ala His Ile Leu Thr
100 105 110
Val Leu Gln Cys Ala Thr Val Ile Gly Phe Ser Tyr Trp Ala Ser Glu
115 120 125
Leu Ile Leu Ala Gln Gln Gln Gln His Lys Lys Tyr His Gly Ser Gln
130 135 140
Val Tyr Val Thr Phe Ala Val Ser Phe Tyr Leu Val Ala Gly Ala Gly
145 150 155 160
Gly Ala Ser Ile Leu Ala Thr Ala Ala Asn Leu Leu Arg His Tyr Pro
165 170 175
Thr Glu Glu Glu Glu Gln Ala Leu Glu Leu Leu Ser Glu Met Glu Glu
180 185 190
Asn Glu Pro Tyr Pro Ala Glu Tyr Glu Val Ile Asn Gln Phe Gln Pro
195 200 205
Pro Pro Ala Tyr Thr Pro
210

<210> 6039
<211> 1130
<212> DNA
<213> Homo sapiens

<400> 6039
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240
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300
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360
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420
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480
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540
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600
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660
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720
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780
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840
cgtgtggaat actttgtaga taagcaactc caagtaaagg ctgtcacctg tgggccgtgg
900
aacacctacg tgtatgctgt ggagaaaggg aagagctgac atgtgtacgt atatgtatat
960
gcaacacctg tgagaccccc attcaggtca aggaaaacca ttgcctgcac cccaagggcc
1020
ccatatttgc ccctcccat cacagtccctg cccttcaccc tcaagcacgg tcctaaactt
1080
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1130

<210> 6040
<211> 312
<212> PRT
<213> Homo sapiens

<400> 6040
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Gly Leu Leu Ala Val Leu Arg Ala Gly Pro Gly Pro Glu Ala Leu Leu

20 25 30
 Gln Val Trp Ala Ala Glu Ser Ala Leu Arg Gly Glu Pro Leu Trp Ala
 35 40 45
 Gln Asn Val Val Pro Glu Ala Glu Gly Glu Asp Asp Pro Ala Gly Glu
 50 55 60
 Ala Gln Ala Gly Arg Leu Pro Leu Leu Pro Cys Ala Arg Ala Tyr Val
 65 70 75 80
 Ser Pro Arg Ala Pro Phe Tyr Arg Pro Leu Ala Pro Glu Leu Arg Ala
 85 90 95
 Arg Gln Leu Glu Leu Gly Ala Glu His Ala Leu Leu Leu Asp Ala Ala
 100 105 110
 Gly Gln Val Phe Ser Trp Gly Gly Gly Arg His Gly Gln Leu Gly His
 115 120 125
 Gly Thr Leu Glu Ala Glu Leu Glu Pro Arg Leu Leu Glu Ala Leu Gln
 130 135 140
 Gly Leu Val Met Ala Glu Val Ala Ala Gly Gly Trp His Ser Val Cys
 145 150 155 160
 Val Ser Glu Thr Gly Asp Ile Tyr Ile Trp Gly Trp Asn Glu Ser Gly
 165 170 175
 Gln Leu Ala Leu Pro Thr Arg Asn Leu Ala Glu Asp Gly Glu Thr Val
 180 185 190
 Ala Arg Glu Ala Thr Glu Leu Asn Glu Asp Gly Ser Gln Val Lys Arg
 195 200 205
 Thr Gly Gly Ala Glu Asp Gly Ala Pro Ala Pro Phe Ile Ala Val Gln
 210 215 220
 Pro Phe Pro Ala Leu Leu Asp Leu Pro Met Gly Ser Asp Ala Val Lys
 225 230 235 240
 Ala Ser Cys Gly Ser Arg His Thr Ala Val Val Thr Arg Thr Gly Glu
 245 250 255
 Leu Tyr Thr Trp Gly Trp Gly Lys Tyr Gly Gln Leu Gly His Glu Asp
 260 265 270
 Thr Thr Ser Leu Asp Arg Pro Arg Arg Val Glu Tyr Phe Val Asp Lys
 275 280 285
 Gln Leu Gln Val Lys Ala Val Thr Cys Gly Pro Trp Asn Thr Tyr Val
 290 295 300
 Tyr Ala Val Glu Lys Gly Lys Ser
 305 310

<210> 6041

<211> 291

<212> DNA

<213> Homo sapiens

<400> 6041

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 120
 cggttggagc agcaaaagca gcagataatg gcagctttaa actcccagac tgccgtgcag
 180
 ttccagcagt atgcagccca acagtatcca gggaactacg aacagcagca aattctcatc
 240
 cgccagttgc aggagcaaca ctatcagcag tacatgcagc agttgtatca c
 291

<210> 6042
<211> 97
<212> PRT
<213> Homo sapiens

<400> 6042
Thr Arg Glu Gly Glu Glu Arg Glu Arg Leu Gln Lys Glu Glu Glu Lys
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Arg Arg Arg Glu Glu Glu Glu Arg Leu Arg Arg Glu Glu Glu Glu Arg
20 25 30
Arg Arg Ile Glu Glu Glu Arg Leu Arg Leu Glu Gln Gln Lys Gln Gln
35 40 45
Ile Met Ala Ala Leu Asn Ser Gln Thr Ala Val Gln Phe Gln Gln Tyr
50 55 60
Ala Ala Gln Gln Tyr Pro Gly Asn Tyr Glu Gln Gln Gln Ile Leu Ile
65 70 75 80
Arg Gln Leu Gln Glu Gln His Tyr Gln Gln Tyr Met Gln Gln Leu Tyr
85 90 95
His

<210> 6043
<211> 558
<212> DNA
<213> Homo sapiens

<400> 6043
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180
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240
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300
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360
tctggccttt tcggcctgtg atgtgattcg agcggtgcta tctttaacct cgggcagggg
420
tggtctcccc cgtcgacgtt gtcagataa cagtcctgca attccatggg ggtggcggca
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540
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558

<210> 6044
<211> 152
<212> PRT
<213> Homo sapiens

<400> 6044
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 Cys Tyr Leu Ser Asn Val Asp Gly Gly Glu His Pro Cys Pro Arg Leu
 20 25 30
 Lys Ile Ala Pro Leu Glu Ser His His Arg Pro Lys Arg Pro Asp Asp
 35 40 45
 Pro Pro Gly Thr Leu Asn Pro Cys Pro Glu Arg Gly Gly Ala Gly Val
 50 55 60
 Trp Ile Pro Ala Gly Ser Phe Gly Thr Gly Lys Asn Arg Gly Cys Ser
 65 70 75 80
 Asp Arg Val Phe Thr Lys Thr Cys Ile Arg Gln Asp Pro Gly Arg Met
 85 90 95
 Trp Val Ala Pro Pro Leu Cys Trp Ala Arg Arg Met Cys Pro His Arg
 100 105 110
 Ser Gln Ile Leu Phe Pro Gln Trp Val Val Gln Asp Thr Leu Asn Phe
 115 120 125
 Cys Met Asn Trp Asp Ile Gln Asn Ser Leu Glu Gln Pro Pro Pro Ser
 130 135 140
 Thr Leu Cys Leu Asp Ile Ser Tyr
 145 150

<210> 6045
 <211> 1916
 <212> DNA
 <213> Homo sapiens

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 180
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 240
 ctgaaagtgc atcctgaaca ggaaaagtta atgacagttc ggactatcac aggaaatata
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 420
 agcagtaact tggttaattct gtctggccaa gtggttgaac actttgatct ggagttccga
 480
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 600
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 660
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 720
 agtgaggaag actacttcag cagccacagg gacgagctcc agagcagaaa ggccattgac
 780

gctgccactc aaacagagcc aggagaggag atgccagggc tgagtgtgag tgagggtggga
840
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900
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960
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1620
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1680
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1800
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1860
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1916

<210> 6046
<211> 457
<212> PRT
<213> Homo sapiens

<400> 6046
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Pro Tyr Gly Cys Lys Asp Ala Leu Arg Gln Gln Leu Arg Ser Ala Arg
20 25 30
Glu Val Ile Ala Val Val Met Asp Val Phe Thr Asp Ile Asp Ile Phe
35 40 45
Arg Asp Leu Gln Glu Ile Cys Arg Lys Gln Gly Val Ala Val Tyr Ile
50 55 60
Leu Leu Asp Gln Ala Leu Leu Ser Gln Phe Leu Asp Met Cys Met Asp

65 70 75 80
Leu Lys Val His Pro Glu Gln Glu Lys Leu Met Thr Val Arg Thr Ile
 85 90 95
Thr Gly Asn Ile Tyr Tyr Ala Arg Ser Gly Thr Lys Ile Ile Gly Lys
 100 105 110
Val His Glu Lys Phe Thr Leu Ile Asp Gly Ile Arg Val Ala Thr Gly
 115 120 125
Ser Tyr Ser Phe Thr Trp Thr Asp Gly Lys Leu Asn Ser Ser Asn Leu
 130 135 140
Val Ile Leu Ser Gly Gln Val Val Glu His Phe Asp Leu Glu Phe Arg
145 150 155 160
Ile Leu Tyr Ala Gln Ser Lys Pro Ile Ser Pro Lys Leu Leu Ser His
 165 170 175
Phe Gln Ser Ser Asn Lys Phe Asp His Leu Thr Asn Arg Lys Pro Gln
 180 185 190
Ser Lys Glu Leu Thr Leu Gly Asn Leu Leu Arg Met Arg Leu Ala Arg
 195 200 205
Leu Ser Ser Thr Pro Arg Lys Ala Asp Leu Asp Pro Glu Met Pro Ala
210 215 220
Glu Gly Lys Ala Glu Arg Lys Pro His Asp Cys Glu Ser Ser Thr Val
225 230 235 240
Ser Glu Glu Asp Tyr Phe Ser Ser His Arg Asp Glu Leu Gln Ser Arg
 245 250 255
Lys Ala Ile Asp Ala Ala Thr Gln Thr Glu Pro Gly Glu Glu Met Pro
 260 265 270
Gly Leu Ser Val Ser Glu Val Gly Thr Gln Thr Ser Ile Thr Thr Ala
275 280 285
Cys Ala Gly Thr Gln Thr Ala Val Ile Thr Arg Ile Ala Ser Ser Gln
290 295 300
Thr Thr Ile Trp Ser Arg Ser Thr Thr Thr Gln Thr Asp Met Asp Glu
305 310 315 320
Asn Ile Leu Phe Pro Arg Gly Thr Gln Ser Thr Glu Gly Ser Pro Val
 325 330 335
Ser Lys Met Ser Val Ser Arg Ser Ser Ser Leu Lys Ser Ser Ser Ser
 340 345 350
Val Ser Ser Gln Gly Ser Val Ala Ser Ser Thr Gly Ser Pro Ala Ser
 355 360 365
Ile Arg Thr Thr Asp Phe His Asn Pro Gly Tyr Pro Lys Tyr Leu Gly
370 375 380
Thr Pro His Leu Glu Leu Tyr Leu Ser Asp Ser Leu Arg Asn Leu Asn
385 390 395 400
Lys Glu Arg Gln Phe His Phe Ala Gly Ile Arg Ser Arg Leu Asn His
 405 410 415
Met Leu Ala Met Leu Ser Arg Arg Thr Leu Phe Thr Glu Asn His Leu
 420 425 430
Gly Leu His Ser Gly Asn Phe Ser Arg Val Asn Leu Leu Ala Val Arg
 435 440 445
Asp Val Ala Leu Tyr Pro Ser Tyr Gln
450 455

<210> 6047

<211> 773

<212> DNA

<213> Homo sapiens

<400> 6047
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120
gatgggaaat gggggatctc atcgcttgtg agtagaggag actttggggg gaaagtgatg
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240
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300
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360
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420
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480
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600
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720
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773

<210> 6048
<211> 129
<212> PRT
<213> Homo sapiens

<400> 6048
Met Val Lys Arg Val Ser Glu Met Ser Asp Lys Lys Gln Leu Arg Ser
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Arg Ser Cys Arg Pro Pro Gly Ser Ser Ser Gly Ser Pro Ser Ser Thr
20 25 30
Gly Thr Thr Leu Glu Lys Ser Cys Leu His His Cys Ser Gly Gly Gly
35 40 45
His Leu Pro Ser Ala Cys Leu Gly Ala Arg Arg Ser Ser Ser Leu Leu
50 55 60
Gly Tyr Gly Ser Cys Arg Asp Thr Gln Ser Trp Thr Pro Asp Pro Leu
65 70 75 80
Pro His Pro Pro Ser Leu Ser Pro Gln Ser Leu Leu Tyr Ser Gln Ala
85 90 95
Met Arg Ser Pro Ile Ser His Gln Glu Leu Thr Arg Pro Leu Gly Lys
100 105 110
Glu Ala Ala Arg Arg Cys Gly His Thr Val Ala Leu Ser Ala Arg
115 120 125
Asp

<210> 6049
<211> 479
<212> DNA
<213> Homo sapiens

<400> 6049
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120
agcagcagta gcagcagtaa cagtagtaac gagagagaag actttgattc cacctcttcc
180
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240
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300
gaagacaccc tggagtttgt agggtttgat gcgaagatgg ctgaggaatc ctctcctcc
360
tcctcctcat cttcaccaac tgctgcaaca tctcaggagc agcaacttaa aaataagagt
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atattaatct cttctgtggg ttcggtgcat catgcagacg ggctagccga atcttctac
479

<210> 6050
<211> 159
<212> PRT
<213> Homo sapiens

<400> 6050
Thr Gly Phe Ser Ser Pro Ser Pro Ser Ala Ala Ala Ala Ala Gln Glu
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Val Arg Ser Ala Thr Asp Gly Asn Thr Ser Thr Thr Pro Pro Thr Ser
20 25 30
Ala Lys Lys Arg Lys Leu Asn Ser Ser Ser Ser Ser Ser Asn Ser
35 40 45
Ser Asn Glu Arg Glu Asp Phe Asp Ser Thr Ser Ser Ser Ser Thr
50 55 60
Pro Pro Leu Gln Pro Arg Asp Ser Ala Ser Pro Ser Thr Ser Ser Phe
65 70 75 80
Cys Leu Gly Val Ser Val Ala Ala Ser Ser His Val Pro Ile Gln Lys
85 90 95
Lys Leu Arg Phe Glu Asp Thr Leu Glu Phe Val Gly Phe Asp Ala Lys
100 105 110
Met Ala Glu Glu Ser Ser Ser Ser Ser Ser Ser Ser Pro Thr Ala
115 120 125
Ala Thr Ser Gln Glu Gln Gln Leu Lys Asn Lys Ser Ile Leu Ile Ser
130 135 140
Ser Val Gly Ser Val His His Ala Asp Gly Leu Ala Glu Ser Ser
145 150 155

<210> 6051
<211> 2404
<212> DNA
<213> Homo sapiens

<400> 6051
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tttcttccat cggttgatcc tgaaacagtt cttcagacag ggcatgaatt gttgtccgaa
120
ttacagcagc gtcgatttaa tggctcagac ggaggggttt catggtctcc tatggatgat
180
gaacttcttg cacagccaca ggttatgaaa ttattagatt cactccgaga gcaatatacc
240
cgctaccagg aagttttagt gcaacgtagc aagcgcacac agttagaaga gattcaacag
300
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Arg Tyr Gln Glu Val Cys Arg Gln Arg Ser Lys Arg Thr Gln Leu Glu
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Phe Arg Gln Asn Leu Leu Gln Ala Ala Leu Glu Phe His Gly Val Ala		190
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His Ile Gln Gly Val Met Glu Asp Met Gln Leu Arg Lys Gln Arg Cys		285
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<212> DNA

<213> Homo sapiens

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<211> 285

<212> PRT

<213> Homo sapiens

<400> 6056

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<211> 500
<212> PRT
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Gly Arg Pro Asn Gly Gly Asn Phe Gly Arg Lys Glu Lys Asn Gly Trp
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85 90 95
Tyr His Gly Gly Ser Ser Arg Ser Arg Ser Ser Ile Phe His Ala Gly
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Lys Ser Gln Gly Leu His Glu Asn Asn Ile Pro Asp Asn Glu Thr Gly
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Pro Ser Leu Asn Pro Glu Tyr Glu Arg Glu Pro Asn His Asn Lys Ser
145 150 155 160
Leu Ala Ala Gly Val Trp Gly Leu His Ala Gln Thr His Thr Tyr Pro
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Thr Lys Lys Ile Ser Gln Ala Pro Leu Leu Glu Tyr Pro Pro Asn Pro
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Lys Ser Arg Ala Pro Arg Met Leu Val Ile Lys Lys Gly Asn Thr Lys
195 200 205
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Pro Val Lys Asn Gly Thr Gly Pro Ser Val Tyr Lys Gly Leu Val Pro
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245 250 255
Lys Glu Asn Lys Val Gly Thr Ser Phe Pro His Glu Ser Thr Phe Gly
260 265 270
Val Gly Asn Phe Asn Ala Phe Lys Ser Thr Ala Lys Asn Phe Ser Pro
275 280 285
Ser Thr Asn Ser Val Lys Glu Cys Asn Arg Ser Asn Ser Ser Ser Pro
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Val Asp Lys Leu Asn Gln Gln Pro Arg Leu Thr Lys Leu Thr Arg Met
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Arg Thr Asp Lys Lys Ser Glu Phe Leu Lys Ala Leu Lys Arg Asp Arg
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<211> 313

<212> PRT

<213> Homo sapiens

<400> 6060

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Ile	Ser	Tyr	Thr	Ile	Thr	Ile	Phe	Gly	Asn	Val	Ser	Ile	Met	Met	Val
		35					40					45			
Cys	Ile	Leu	Asp	Pro	Lys	Leu	His	Thr	Pro	Met	Tyr	Phe	Phe	Leu	Thr
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Cys	Val	Ala	His	Leu	Ile	Ile	Phe	Leu	Ala	Leu	Gly	Ala	Thr	Glu	Cys
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 <211> 1582
 <212> DNA
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<211> 226

<212> PRT

<213> Homo sapiens

<400> 6062

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Ile	Leu	Lys	Ile	Cys	His	Thr	Leu	Thr	Glu	Lys	Leu	Val	Ala	Met	Thr
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Cys	His	Leu	Thr	Gly	Gly	Leu	Asp	Trp	Ile	Asp	Gln	Ser	Leu	Ser	Ala
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<211> 2286

<212> DNA

<213> Homo sapiens

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<210> 6064
<211> 233
<212> PRT
<213> Homo sapiens

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35 40 45
Asp Ala Ala Leu Ala Leu Gln Ala Arg Gly Cys Ser Val Lys Ile Trp
50 55 60
Thr Ala His Tyr Asp Pro Gly His Cys Phe Ala Glu Ser Arg Glu Leu
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Pro Val Arg Cys Ala Gly Asp Trp Leu Pro Arg Gly Leu Gly Trp Gly
85 90 95
Gly Arg Gly Ala Ala Val Cys Ala Tyr Val Arg Met Val Phe Leu Ala
100 105 110
Leu Tyr Val Leu Phe Leu Ala Asp Glu Phe Asp Val Val Val Cys
115 120 125
Asp Gln Val Ser Ala Cys Ile Pro Val Phe Arg Leu Ala Arg Arg Arg
130 135 140
Lys Lys Ile Leu Phe Tyr Cys His Phe Pro Asp Leu Leu Leu Thr Lys

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145          150          155          160
Arg Asp Ser Phe Leu Lys Arg Leu Tyr Arg Ala Pro Ile Asp Trp Ile
          165          170          175
Glu Glu Tyr Thr Thr Gly Met Ala Asp Cys Ile Leu Val Asn Ser Gln
          180          185          190
Phe Thr Ala Ala Val Phe Lys Glu Thr Phe Lys Ser Leu Ser His Ile
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Asp Pro Asp Val Leu Tyr Pro Ser Leu Asn Val Thr Ser Phe Asp Ser
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<212> DNA
<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 6066

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			20					25					30		
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			35				40					45			
Ile	Ile	Glu	Asp	Trp	Asp	Leu	Met	Glu	Arg	Phe	Met	Glu	Gln	Val	Val
		50				55				60					
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<210> 6067

<211> 406

<212> DNA

<213> Homo sapiens

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<211> 117

<212> PRT

<213> Homo sapiens

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			20					25					30		
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Pro	Ala	Tyr	Ser	His	Ser	Ala	Val	Gly	Arg	Pro	Pro	Leu	Pro	Arg	Lys
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Arg	Gly	Ala	Val	Ser	Ser	Gly	Arg	Leu	His	Arg	Arg	Gly	Thr	Gly	Ala
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<210> 6069

<211> 456

<212> DNA

<213> Homo sapiens

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<211> 148

<212> PRT

<213> Homo sapiens

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		20					25						30		
His	Arg	Tyr	His	Arg	Lys	Glu	Asn	Leu	Glu	Tyr	Cys	Ile	Met	Val	Ile
		35				40					45				
Gly	Val	Pro	Asn	Val	Gly	Lys	Ser	Ser	Leu	Ile	Asn	Ser	Leu	Arg	Arg
	50					55					60				
Gln	His	Leu	Arg	Lys	Gly	Lys	Ala	Thr	Arg	Val	Gly	Gly	Glu	Pro	Gly
65					70				75					80	
Ile	Thr	Arg	Ala	Val	Met	Ser	Lys	Ile	Gln	Val	Glu	Ser	Ser	Gly	Ala
			85					90						95	
Arg	Pro	Ser	Thr	Leu	Ser	Arg	Ala	Leu	Gln	Ala	Ser	Gly	Thr	Cys	Arg
		100					105					110			
Pro	Leu	Cys	Gly	Phe	Arg	Leu	Leu	Thr	Thr	Leu	Pro	Ser	Pro	Pro	Leu
	115					120					125				
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<212> DNA

<213> Homo sapiens

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35 40 45
Ala Trp Trp Arg Val Pro Val Val Pro Ala Thr Arg Glu Ala Glu Ala
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65 70 75

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<211> 4668
<212> DNA
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<210> 6076

<211> 601

<212> PRT

<213> Homo sapiens

<400> 6076

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Glu	Val	Gly	Leu	Ala	Leu	Lys	Asp	Leu	Ala	Lys	Gln	Tyr	Ser	Asp	Arg
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Leu	Glu	Cys	Cys	Glu	Asn	Glu	Val	Glu	Lys	Val	Ile	Glu	Glu	Ile	Arg
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Cys	Lys	Ala	Ile	Glu	Arg	Gly	Thr	Gly	Asn	Asp	Asn	Tyr	Arg	Thr	Thr
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Gly	Ile	Ala	Thr	Ile	Glu	Val	Phe	Leu	Pro	Pro	Arg	Leu	Lys	Lys	Asp
			85						90					95	
Arg	Lys	Asn	Leu	Leu	Glu	Thr	Arg	Leu	His	Ile	Thr	Gly	Arg	Glu	Leu
			100						105				110		
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Gln	Gly	Val	Ala	His	Asn	Val	Lys	Ala	Met	Val	Leu	Glu	Leu	Lys	Gln
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195 200 205
Met Thr Pro Tyr Leu Asp Ile Ala Asn Gln Thr Gly Arg Ser Ile Arg
210 215 220
Ile Pro Pro Ser Glu Arg Lys Ala Leu Met Leu Ala Met Gly Tyr His
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Glu Lys Gly Arg Ala Phe Leu Lys Arg Lys Glu Tyr Gly Ile Ala Leu
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Pro Cys Leu Leu Asp Ala Asp Lys Tyr Phe Cys Glu Cys Cys Arg Glu
260 265 270
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275 280 285
Trp Cys Tyr Phe Arg Leu Glu Gln Leu Glu Cys Leu Asp Asp Ala Glu
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325 330 335
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Ser Gly Asn Asp Val Glu Ala Tyr Glu Tyr Leu Asn Arg His Val Ser
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Ala Gln Gln Ile Leu Leu Ser Asn Pro Gln Met Trp Trp Leu Asn Asp
450 455 460
Ser Asn Pro Glu Thr Asp Asn Arg Gln Glu Ser Pro Ser Gln Glu Asn
465 470 475 480
Ile Asp Arg Leu Val Tyr Met Gly Phe Asp Ala Leu Val Ala Glu Ala
485 490 495
Ala Leu Arg Val Phe Arg Gly Asn Val Gln Leu Ala Ala Gln Thr Leu
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Ala His Asn Gly Gly Ser Leu Pro Pro Glu Leu Pro Leu Ser Pro Glu
515 520 525
Asp Ser Leu Ser Pro Pro Ala Thr Ser Pro Ser Asp Ser Ala Gly Thr
530 535 540
Ser Ser Ala Ser Thr Asp Glu Asp Met Glu Thr Glu Ala Val Asn Glu
545 550 555 560
Ile Leu Glu Asp Ile Pro Glu His Glu Glu Asp Tyr Leu Asp Ser Thr
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595

600

<210> 6077

<211> 2093

<212> DNA

<213> Homo sapiens

<400> 6077

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1380

5260

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2093

<210> 6078

<211> 213

<212> PRT

<213> Homo sapiens

<400> 6078

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			20					25					30		
Ser	Gly	Arg	Glu	Gly	Ala	Ser	Gly	Pro	Gly	Val	Gly	Pro	His	Ile	Tyr
		35					40					45			
Val	Arg	Glu	Ala	Glu	Asp	Arg	Glu	Leu	Val	Thr	Met	Ala	Gly	Pro	Gln
	50					55				60					
Pro	Leu	Ala	Leu	Gln	Leu	Glu	Gln	Leu	Leu	Asn	Pro	Arg	Pro	Ser	Glu
65				70						75				80	
Ala	Asp	Pro	Glu	Ala	Asp	Pro	Glu	Glu	Ala	Thr	Ala	Ala	Arg	Val	Ile
			85						90				95		
Asp	Arg	Phe	Asp	Glu	Gly	Glu	Asp	Gly	Glu	Gly	Asp	Phe	Leu	Val	Val
		100						105				110			
Gly	Ser	Ile	Arg	Lys	Leu	Ala	Ser	Ala	Ser	Leu	Leu	Asp	Thr	Asp	Lys
		115					120					125			
Arg	Tyr	Cys	Gly	Lys	Thr	Thr	Ser	Arg	Lys	Ala	Trp	Asn	Glu	Asp	His
	130					135				140					
Trp	Glu	Gln	Thr	Leu	Pro	Gly	Ser	Ser	Asp	Glu	Glu	Ile	Ser	Asp	Glu
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Glu	Gly	Ser	Gly	Asp	Glu	Asp	Ser	Glu	Gly	Leu	Gly	Leu	Glu	Glu	Tyr
			165					170					175		
Asp	Glu	Asp	Asp	Leu	Gly	Ala	Ala	Glu	Glu	Gln	Glu	Cys	Gly	Asp	Gln

	180		185		190										
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<210> 6079
 <211> 651
 <212> DNA
 <213> Homo sapiens

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 420
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<210> 6080
 <211> 162
 <212> PRT
 <213> Homo sapiens

<400> 6080
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 20 25 30
 Gln Leu Gln Gly Gly Arg Phe Leu Met Gly Thr Asn Ser Pro Asp Ser
 35 40 45
 Arg Asp Gly Glu Gly Pro Val Arg Glu Ala Thr Val Lys Pro Phe Ala
 50 55 60
 Ile Asp Ile Phe Pro Val Thr Asn Lys Asp Phe Arg Asp Phe Val Arg
 65 70 75 80
 Glu Lys Lys Tyr Arg Thr Glu Ala Glu Met Phe Gly Trp Ser Phe Val
 85 90 95
 Phe Glu Asp Phe Val Ser Asp Glu Leu Arg Asn Lys Ala Thr Gln Pro

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<211> 655
<212> DNA
<213> Homo sapiens
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<210> 6082
<211> 218
<212> PRT
<213> Homo sapiens
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          20          25          30
Val Ile Pro Leu Glu Asp Pro Leu Gly Pro Ala Val Ile Thr Leu Leu
          35          40          45
Leu Asp Glu Cys Pro Leu Pro Thr Lys Asp Ala Leu Gln Lys Leu Thr
          50          55          60
Glu Ile Leu Asn Leu Asn Gly Glu Val Ala Cys Gln Asp Ser Ser His

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65 70 75 80
Pro Ala Lys His Arg Asn Thr Ser Ala Val Leu Gly Cys Leu Ala Glu
 85 90 95
Lys Leu Ala Gly Pro Ala Ser Ile Gly Leu Leu Ser Pro Gly Ile Leu
 100 105 110
Glu Tyr Leu Leu Gln Cys Leu Lys Leu Gln Ser His Pro Thr Val Met
 115 120 125
Leu Phe Ala Leu Ile Ala Leu Glu Lys Phe Ala Gln Thr Ser Glu Asn
 130 135 140
Lys Leu Thr Ile Ser Glu Ser Ser Ile Ser Asp Arg Leu Val Thr Leu
145 150 155 160
Glu Ser Trp Ala Asn Asp Pro Asp Tyr Leu Lys Arg Gln Val Gly Phe
 165 170 175
Cys Ala Gln Trp Ser Leu Asp Asn Leu Phe Leu Lys Glu Gly Arg Gln
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Ser Asn Asp Val Ser Glu Tyr Leu Lys Ile
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<210> 6083

<211> 358

<212> DNA

<213> Homo sapiens

<400> 6083

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<210> 6084

<211> 101

<212> PRT

<213> Homo sapiens

<400> 6084

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Leu Ile Val Glu Gly His Leu Thr Lys Ala Val Glu Glu Thr Lys Leu
 35 40 45
Ser Lys Glu Asn Gln Thr Arg Ala Lys Glu Ser Asp Phe Ser Asp Thr
 50 55 60
Leu Ser Pro Ser Lys Glu Lys Ser Ser Asp Asp Thr Thr Asp Ala Gln

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Lys Asp Asp Leu Gln
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<210> 6085

<211> 2307

<212> DNA

<213> Homo sapiens

<400> 6085

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180	cacatagagt	cattactaaa	tgggggggatt	accatcactg	tgaactttctg	gtataagggg
240	gctcccaccc	ctaagagaat	tgaatatcct	ctcaaagctc	atcagaaaagt	ggccataatg
300	agaaacattg	agaagatgct	tggagaggcc	ttggggaacc	cacaagaggt	ggggcccttg
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2307

<210> 6086
<211> 84
<212> PRT
<213> Homo sapiens

<400> 6086
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Ile Thr Leu Gly Val Gln Ala Ser Gly Cys Val Cys Val Cys Ala Cys
35 40 45
Val Cys Val Cys Val Ser Val Cys Val Cys Val Cys Val His Thr Gly
50 55 60
Gln Pro Pro Tyr Leu Pro Arg Phe Ser Thr Ala Tyr Leu Phe Gln Trp
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Asp Ser Thr Val

<210> 6087
<211> 1506
<212> DNA
<213> Homo sapiens

<400> 6087
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<400> 6091

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<213> Homo sapiens

<400> 6094

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Thr	Gly	Pro	Val	Ser	Gln	Ser	Phe	Leu	Gln	Met	Leu	Ile	Gly	Val	Cys
			35				40					45			
Trp	Asn	Pro	Lys	Pro	Leu	Pro	Arg	Leu	Gln	Ala	Pro	Asp	Gly	Leu	Leu
			50				55				60				
Ser	Cys	Asn	Phe	Leu	Gly	Glu	Glu	Thr	Phe	Ser	Ser	Phe	Pro	Phe	Leu
65					70					75				80	
Val	His	Pro	Cys	Thr	Leu	Val	Leu	Ser	Gln	Pro	Leu	Pro	His	Ile	Val

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Pro Asp Ser Arg Gly Thr Ser Ser Leu His Arg Ala Ala Ala Ala Gly
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Leu Arg Ala Glu Pro Val Gly Ala Glu Ala Leu Ala Pro Glu Val Gln
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Pro Leu Ser Leu Gly Pro Leu Gly
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<210> 6095
<211> 441
<212> DNA
<213> Homo sapiens

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180
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300
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441

<210> 6096
<211> 97
<212> PRT
<213> Homo sapiens

<400> 6096
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Lys Lys Trp Asn Ala Val Ala Met Trp Ser Trp Asp Val Glu Cys Asp
35 40 45
Thr Cys Ala Ile Cys Arg Val Gln Val Met Val Val Trp Gly Glu Cys
50 55 60
Asn His Ser Phe His Asn Cys Cys Met Ser Leu Trp Val Lys Gln Asn
65 70 75 80
Asn Arg Cys Pro Leu Cys Gln Gln Asp Trp Val Val Gln Arg Ile Gly
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Lys

<210> 6097
<211> 2404

<212> DNA

<213> Homo sapiens

<400> 6097

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<210> 6098

<211> 631

<212> PRT

<213> Homo sapiens

<400> 6098

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Leu	Phe	Arg	Gly	Leu	Gln	Asn	His	Pro	Met	Val	Leu	Pro	Ile	Cys	Ser
			20					25					30		
Arg	Ser	Gly	Asp	Val	Ile	Glu	Tyr	Leu	Leu	Lys	Asn	Gln	Trp	Phe	Val
			35					40					45		
Arg	Cys	Gln	Glu	Met	Gly	Ala	Arg	Ala	Ala	Lys	Ala	Val	Glu	Ser	Gly
			50					55					60		
Ala	Leu	Glu	Leu	Ser	Pro	Ser	Phe	His	Gln	Lys	Asn	Trp	Gln	His	Trp
					70					75				80	
Phe	Ser	His	Ile	Gly	Asp	Trp	Cys	Val	Ser	Arg	Gln	Leu	Trp	Trp	Gly
					85					90				95	
His	Gln	Ile	Pro	Ala	Tyr	Leu	Val	Xaa	Xaa	Gly	Pro	Cys	Ala	Xaa	Gly
			100					105					110		
Glu	Glu	Xaa	Thr	Cys	Trp	Val	Val	Gly	Arg	Ser	Gly	Ala	Glu	Ala	Arg

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Glu Leu Ala Ala Glu Leu Thr Gly Arg Gln Gly Ala Glu Pro Thr Leu		
130	135	140
Glu Arg Asp Pro Asp Val Leu Asp Thr Trp Phe Ser Ser Ala Leu Phe		
145	150	155
Pro Phe Ser Ala Leu Gly Trp Pro Gln Glu Thr Pro Asp Leu Ala Arg		
165	170	175
Phe Tyr Pro Leu Ser Leu Leu Glu Thr Gly Ser Asp Leu Leu Leu Phe		
180	185	190
Trp Val Gly Arg Met Val Met Leu Gly Thr Gln Leu Thr Gly Gln Leu		
195	200	205
Pro Phe Ser Lys Val Leu Leu His Pro Met Val Arg Asp Arg Gln Gly		
210	215	220
Arg Lys Met Ser Lys Ser Leu Gly Asn Val Leu Asp Pro Arg Asp Ile		
225	230	235
Ile Ser Gly Val Glu Met Gln Leu Leu Gln Glu Lys Leu Arg Ser Gly		
245	250	255
Asn Leu Asp Pro Ala Glu Leu Ala Ile Val Ala Ala Ala Gln Lys Lys		
260	265	270
Asp Phe Pro His Gly Ile Pro Glu Cys Gly Thr Asp Ala Leu Arg Phe		
275	280	285
Thr Leu Cys Ser His Gly Val Gln Ala Gly Asp Leu His Leu Ser Val		
290	295	300
Ser Glu Val Gln Ser Cys Arg His Phe Cys Asn Lys Ile Trp Asn Ala		
305	310	315
Leu Arg Phe Ile Leu Asn Ala Leu Gly Glu Lys Phe Val Pro Gln Pro		
325	330	335
Ala Glu Glu Leu Ser Pro Ser Ser Pro Met Asp Ala Trp Ile Leu Ser		
340	345	350
Arg Leu Ala Leu Ala Ala Gln Glu Cys Glu Arg Gly Phe Leu Thr Arg		
355	360	365
Glu Leu Ser Leu Val Thr His Ala Leu His His Phe Trp Leu His Asn		
370	375	380
Leu Cys Asp Val Tyr Leu Glu Ala Val Lys Pro Val Leu Trp His Ser		
385	390	395
Pro Arg Pro Leu Gly Pro Pro Gln Val Leu Phe Ser Cys Ala Asp Leu		
405	410	415
Gly Leu Arg Leu Leu Ala Pro Leu Met Pro Phe Leu Ala Glu Glu Leu		
420	425	430
Trp Gln Arg Leu Pro Pro Arg Pro Gly Cys Pro Pro Ala Pro Ser Ile		
435	440	445
Ser Val Ala Pro Tyr Pro Ser Ala Cys Ser Leu Glu His Trp Arg Gln		
450	455	460
Pro Glu Leu Glu Arg Arg Phe Ser Arg Val Gln Glu Val Val Gln Val		
465	470	475
Leu Arg Ala Leu Arg Ala Thr Tyr Gln Leu Thr Lys Ala Arg Pro Arg		
485	490	495
Val Leu Leu Gln Ser Ser Glu Pro Gly Asp Gln Gly Leu Phe Glu Ala		
500	505	510
Phe Leu Glu Pro Leu Gly Thr Leu Gly Tyr Cys Gly Ala Val Gly Leu		
515	520	525
Leu Pro Pro Gly Thr Ala Ala Pro Ser Gly Trp Ala Gln Ala Pro Leu		
530	535	540
Ser Asp Thr Ala Gln Val Tyr Met Glu Leu Gln Gly Leu Val Asp Pro		

545 550 555 560
Gln Ile Gln Leu Pro Leu Leu Ala Ala Arg Arg Tyr Lys Leu Gln Lys
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Gln Leu Asp Ser Leu Thr Ala Arg Thr Pro Ser Glu Gly Glu Ala Gly
 580 585 590
Thr Gln Arg Gln Gln Lys Leu Ser Ser Leu Gln Leu Glu Leu Ser Lys
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Leu Asp Lys Ala Ala Ser His Leu Arg Gln Leu Met Asp Glu Pro Pro
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<210> 6099

<211> 3957

<212> DNA

<213> Homo sapiens

<400> 6099

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<210> 6100
<211> 1102
<212> PRT
<213> Homo sapiens

<400> 6100
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Pro Ala Ala Gly Gln Pro Arg Pro Pro Ala Pro Ala Ser Arg Gly Pro

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Met Pro Ala Arg Ile Gly Tyr Tyr Glu Ile Asp Arg Thr Ile Gly Lys		
50	55	60
Gly Asn Phe Ala Val Val Lys Arg Ala Thr His Leu Val Thr Lys Ala		
65	70	75
Lys Val Ala Ile Lys Ile Ile Asp Lys Thr Gln Leu Asp Glu Glu Asn		80
	85	90
Leu Lys Lys Ile Phe Arg Glu Val Gln Ile Met Lys Met Leu Cys His		95
	100	105
Pro His Ile Ile Arg Leu Tyr Gln Val Met Glu Thr Glu Arg Met Ile		110
	115	120
Tyr Leu Val Thr Glu Tyr Ala Ser Gly Gly Glu Ile Phe Asp His Leu		125
	130	135
Val Ala His Gly Arg Met Ala Glu Lys Glu Ala Arg Arg Lys Phe Lys		140
145	150	155
Gln Ile Val Thr Ala Val Tyr Phe Cys His Cys Arg Asn Ile Val His		160
	165	170
Arg Asp Leu Lys Ala Glu Asn Leu Leu Leu Asp Ala Asn Leu Asn Ile		175
	180	185
Lys Ile Ala Asp Phe Gly Phe Ser Asn Leu Phe Thr Pro Gly Gln Leu		190
	195	200
Leu Lys Thr Trp Cys Gly Ser Pro Pro Tyr Ala Ala Pro Glu Leu Phe		205
	210	215
Glu Gly Lys Glu Tyr Asp Gly Pro Lys Val Asp Ile Trp Ser Leu Gly		220
225	230	235
Val Val Leu Tyr Val Leu Val Cys Gly Ala Leu Pro Phe Asp Gly Ser		240
	245	250
Thr Leu Gln Asn Leu Arg Ala Arg Val Leu Ser Gly Lys Phe Arg Ile		255
	260	265
Pro Phe Phe Met Ser Thr Glu Cys Glu His Leu Ile Arg His Met Leu		270
	275	280
Val Leu Asp Pro Asn Lys Arg Leu Ser Met Glu Gln Ile Cys Lys His		285
	290	295
Lys Trp Met Lys Leu Gly Asp Ala Asp Pro Asn Phe Asp Arg Leu Ile		300
305	310	315
Ala Glu Cys Gln Gln Leu Lys Glu Glu Arg Gln Val Asp Pro Leu Asn		320
	325	330
Glu Asp Val Leu Leu Ala Met Glu Asp Met Gly Leu Asp Lys Glu Gln		335
	340	345
Thr Leu Gln Ala Glu Gln Ala Gly Thr Ala Met Asn Ile Ser Val Pro		350
	355	360
Gln Val Gln Leu Ile Asn Pro Glu Asn Gln Ile Val Glu Pro Asp Gly		365
	370	375
Thr Leu Asn Leu Asp Ser Asp Glu Gly Glu Glu Pro Ser Pro Glu Ala		380
385	390	395
Leu Val Arg Tyr Leu Ser Met Arg Arg His Thr Val Gly Val Ala Asp		400
	405	410
Pro Arg Thr Glu Val Met Glu Asp Leu Gln Lys Leu Leu Pro Gly Phe		415
	420	425
Pro Gly Val Asn Pro Gln Ala Pro Phe Leu Gln Val Ala Pro Asn Val		430
	435	440
Asn Phe Met His Asn Leu Leu Pro Met Gln Asn Leu Gln Pro Thr Gly		445
	450	455
Gln Leu Glu Tyr Lys Glu Gln Ser Leu Leu Gln Pro Pro Thr Leu Gln		460

465 470 475 480
Leu Leu Asn Gly Met Gly Pro Leu Gly Arg Arg Ala Ser Asp Gly Gly
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Ala Asn Ile Gln Leu His Ala Gln Gln Leu Leu Lys Arg Pro Arg Gly
 500 505 510
Pro Ser Pro Leu Val Thr Met Thr Pro Ala Val Pro Ala Val Thr Pro
 515 520 525
Val Asp Glu Glu Ser Ser Asp Gly Glu Pro Asp Gln Glu Ala Val Gln
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Ser Ser Thr Tyr Lys Asp Ser Asn Thr Leu His Leu Pro Thr Glu Arg
545 550 555 560
Phe Ser Pro Val Arg Arg Phe Ser Asp Gly Ala Ala Ser Ile Gln Ala
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Phe Lys Ala His Leu Glu Lys Met Gly Asn Asn Ser Ser Ile Lys Gln
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Leu Gln Gln Glu Cys Glu Gln Leu Gln Lys Met Tyr Gly Gly Gln Ile
 595 600 605
Asp Glu Arg Thr Leu Glu Lys Thr Gln Gln Gln His Met Leu Tyr Gln
610 615 620
Gln Glu Gln His His Gln Ile Leu Gln Gln Gln Ile Gln Asp Ser Ile
630 635 640
Cys Pro Pro Gln Pro Ser Pro Pro Leu Gln Ala Ala Cys Glu Asn Gln
 645 650 655
Pro Ala Leu Leu Thr His Gln Leu Gln Arg Leu Arg Ile Gln Pro Ser
 660 665 670
Ser Pro Pro Pro Asn His Pro Asn Asn His Leu Phe Arg Gln Pro Ser
 675 680 685
Asn Ser Pro Pro Pro Met Ser Ser Ala Met Ile Gln Pro His Gly Ala
690 695 700
Ala Ser Ser Ser Gln Phe Gln Gly Leu Pro Ser Arg Ser Ala Ile Phe
705 710 715 720
Gln Gln Gln Pro Glu Asn Cys Ser Ser Pro Pro Asn Val Ala Leu Thr
 725 730 735
Cys Leu Gly Met Gln Gln Pro Ala Gln Ser Gln Gln Val Thr Ile Gln
 740 745 750
Val Gln Glu Pro Val Asp Met Leu Ser Asn Met Pro Gly Thr Ala Ala
755 760 765
Gly Ser Ser Gly Arg Gly Ile Ser Ile Ser Pro Ser Ala Gly Gln Met
770 775 780
Gln Met Gln His Arg Thr Asn Leu Met Ala Thr Leu Ser Tyr Gly His
785 790 795 800
Arg Pro Leu Ser Lys Gln Leu Ser Ala Asp Ser Ala Glu Ala His Ser
 805 810 815
Leu Asn Val Asn Arg Phe Ser Pro Ala Asn Tyr Asp Gln Ala His Leu
 820 825 830
His Pro His Leu Phe Ser Asp Gln Ser Arg Gly Ser Pro Ser Ser Tyr
 835 840 845
Ser Pro Ser Thr Gly Val Gly Phe Ser Pro Thr Gln Ala Leu Lys Val
850 855 860
Pro Pro Leu Asp Gln Phe Pro Thr Phe Pro Pro Ser Ala His Gln Gln
865 870 875 880
Pro Pro His Tyr Thr Thr Ser Ala Leu Gln Gln Ala Leu Leu Ser Pro
 885 890 895
Thr Pro Pro Asp Tyr Thr Arg His Gln Gln Val Pro His Ile Leu Gln

900 905 910
 Gly Leu Leu Ser Pro Arg His Ser Leu Thr Gly His Ser Asp Ile Arg
 915 920 925
 Leu Pro Pro Thr Glu Phe Ala Gln Leu Ile Lys Arg Gln Gln Gln
 930 935 940
 Arg Gln Gln Gln Gln Gln Gln Gln Gln Gln Glu Tyr Gln Glu Leu
 945 950 955 960
 Phe Arg His Met Asn Gln Gly Asp Ala Gly Ser Leu Ala Pro Ser Leu
 965 970 975
 Gly Gly Gln Ser Met Thr Glu Arg Gln Ala Leu Ser Tyr Gln Asn Ala
 980 985 990
 Asp Ser Tyr His His Thr Ile Gln Asn Ser Asp Asp Ala Tyr Val Gln
 995 1000 1005
 Leu Asp Asn Leu Pro Gly Met Ser Leu Val Ala Gly Lys Ala Leu Ser
 1010 1015 1020
 Ser Ala Arg Met Ser Asp Ala Val Leu Ser Gln Ser Ser Leu Met Gly
 1025 1030 1035 1040
 Ser Gln Gln Phe Gln Asp Gly Glu Asn Glu Glu Cys Gly Ala Ser Leu
 1045 1050 1055
 Gly Gly His Glu His Pro Asp Leu Ser Asp Gly Ser Gln His Leu Asn
 1060 1065 1070
 Ser Ser Cys Tyr Pro Ser Thr Cys Ile Thr Asp Ile Leu Leu Ser Tyr
 1075 1080 1085
 Lys His Pro Glu Val Ser Phe Ser Met Glu Gln Ala Gly Val
 1090 1095 1100

<210> 6101
 <211> 1447
 <212> DNA
 <213> Homo sapiens

<400> 6101
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 120
 catctagaaa tatactccgt gatctttctt gatggccaga ctgtgtaaaa ttcatacagt
 180
 gtttactaca gggatcccca aatattgtta gttgaatgaa caaacacaca tttcaaggag
 240
 ggcactacag tgagtagatg aacagttttc tgataggaga ttgtacaagt aatgttttca
 300
 ccagtgtatt ttaggacagc agattcagat taatgcgctg ggactgaatg caaatagtaa
 360
 aattacaaat ataaagtaaa aatttggaac ctttgccaca gagaggaata ataaattgat
 420
 ttaataattt gaaagaactg taaggtttag gttttgttct ttttttagt gcgactgaga
 480
 ttggagtctg tttgtagaca tatctgaaaa aagtgaaggg ggagatggaa gatggtaa
 540
 gccaaaggaa agatggaagg ataaatcagt gtaataaaaa ggagcacttc tttttcgcca
 600
 acagaagtaa aggtaaaggt taagtgtctg agttaacgaa tggattgttg acctctgggg
 660

aggggtgctcc catcagctca gctttgtgac gacctaagaa tatcccttcc acacctttcc
720
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780
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840
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960
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1260
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1320
acttgcggtta cgtccctttg tgaaggcagg cccttcgcgg ctcccagat cagtccagcc
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1440
agccgcc
1447

<210> 6102
<211> 123
<212> PRT
<213> Homo sapiens

<400> 6102
Met Ala Leu Asn Asn Val Ser Leu Ser Ser Gly Asp Gln Arg Ser Arg
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Val Ala Tyr Arg Ser Ser His Gly Asp Leu Arg Pro Arg Ala Ser Ala
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Leu Ala Met Val Ser Gly Asp Gly Phe Leu Val Ser Arg Pro Glu Ala
35 40 45
Ile His Leu Gly Pro Arg Gln Ala Val Arg Pro Ser Val Arg Ala Glu
50 55 60
Ser Arg Arg Val Asp Gly Gly Gly Arg Ser Pro Arg Glu Pro Asp Gly
65 70 75 80
Arg Gly Arg Ser Arg Gln Ala Arg Phe Ser Pro Tyr Pro Ile Pro Ala
85 90 95
Val Glu Pro Asp Leu Leu Arg Ser Val Leu Gln Gln Arg Leu Ile Ala
100 105 110
Leu Gly Gly Val Ile Ala Ala Arg Ile Ser Val
115 120

<210> 6103
<211> 309

<212> DNA

<213> Homo sapiens

<400> 6103

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120
agaacctatg ccttgatgaa gaagattggg cagtccccag tgagagtcct gaaggagatt
180
gacggcttcg tcctgaaccg cctgcagtac gccgtcatca gtgaggcctg gagactggtg
240
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300
cggtacgcg
309

<210> 6104

<211> 71

<212> PRT

<213> Homo sapiens

<400> 6104

Glu Thr Ala Pro Ala Thr Met Asp Arg Thr Tyr Ala Leu Met Lys Lys
1 5 10 15
Ile Gly Gln Ser Pro Val Arg Val Leu Lys Glu Ile Asp Gly Phe Val
20 25 30
Leu Asn Arg Leu Gln Tyr Ala Val Ile Ser Glu Ala Trp Arg Leu Val
35 40 45
Glu Glu Glu Ile Val Ser Pro Ser Asp Leu Asp Leu Val Met Ser Asp
50 55 60
Gly Leu Gly Met Arg Tyr Ala
65 70

<210> 6105

<211> 1846

<212> DNA

<213> Homo sapiens

<400> 6105

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120
gggatgaagt ggtgtctccc cttccatctg ctctgcaggg gtccctcagg ctccctatca
180
gccccctcag ctgcctcagt tatctctgca ccccatctt cctcctcccg acatcgcaaa
240
cgtcgcagga cttccagcaa gtcggaggca ggggctaggg gtggaggcca gggttccaag
300
gaaaagggcc gagggagttg gggaggccgc caccaccacc accaccact gcctgcagca
360
ggcttcaaaa agcaacagcg caagttccag tatgggaatt attgcaaata ctatgggtac
420

cgcaatcctt cctgtgagga tgggcgcctt cgggtgttga agcctgagtg gtttcggggc
480
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540
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600
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660
gaccgggggg cagaggggtga ggaaggacc accaccgttc gaaagaggag ctgcttccca
720
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900
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960
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1020
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1320
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1620
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1680
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1740
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1800
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa
1846

<210> 6106
<211> 405
<212> PRT
<213> Homo sapiens

<400> 6106
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Ala Ala Ala Ala Gln Gly Pro Glu Pro Gly Met Pro Pro Asn Pro Met
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Asn Ser Thr Gln Pro Ser Thr Ala Gly Met Lys Trp Cys Leu Pro Phe
35 40 45
His Leu Leu Cys Arg Gly Pro Ser Gly Ser Leu Ser Ala Pro Pro Ala
50 55 60
Ala Ser Val Ile Ser Ala Pro Pro Ser Ser Ser Ser Arg His Arg Lys
65 70 75 80
Arg Arg Arg Thr Ser Ser Lys Ser Glu Ala Gly Ala Arg Gly Gly Gly
85 90 95
Gln Gly Ser Lys Glu Lys Gly Arg Gly Ser Trp Gly Gly Arg His His
100 105 110
His His His Pro Leu Pro Ala Ala Gly Phe Lys Lys Gln Gln Arg Lys
115 120 125
Phe Gln Tyr Gly Asn Tyr Cys Lys Tyr Tyr Gly Tyr Arg Asn Pro Ser
130 135 140
Cys Glu Asp Gly Arg Leu Arg Val Leu Lys Pro Glu Trp Phe Arg Gly
145 150 155 160
Arg Asp Val Leu Asp Leu Gly Cys Asn Val Gly His Leu Thr Leu Ser
165 170 175
Ile Ala Cys Lys Trp Gly Pro Ser Arg Met Val Gly Leu Asp Ile Asp
180 185 190
Ser Arg Leu Ile His Ser Ala Arg Gln Asn Ile Arg His Tyr Leu Ser
195 200 205
Glu Glu Leu Arg Leu Pro Pro Gln Thr Leu Glu Gly Asp Pro Gly Ala
210 215 220
Glu Gly Glu Glu Gly Thr Thr Thr Val Arg Lys Arg Ser Cys Phe Pro
225 230 235 240
Ala Ser Leu Thr Ala Ser Arg Gly Pro Ile Ala Ala Pro Gln Val Pro
245 250 255
Leu Asp Gly Ala Asp Thr Ser Val Phe Pro Asn Asn Val Val Phe Val
260 265 270
Thr Gly Asn Tyr Val Leu Asp Arg Asp Asp Leu Val Glu Ala Gln Thr
275 280 285
Pro Glu Tyr Asp Val Val Leu Cys Leu Ser Leu Thr Lys Trp Val His
290 295 300
Leu Asn Trp Gly Asp Glu Gly Leu Lys Arg Met Phe Arg Arg Ile Tyr
305 310 315 320
Arg His Leu Arg Pro Gly Gly Ile Leu Val Leu Glu Pro Gln Pro Trp
325 330 335
Ser Ser Tyr Gly Lys Arg Lys Thr Leu Thr Glu Thr Ile Tyr Lys Asn
340 345 350
Tyr Tyr Arg Ile Gln Leu Lys Pro Glu Gln Phe Ser Ser Tyr Leu Thr
355 360 365
Ser Pro Asp Val Gly Phe Ser Ser Tyr Glu Leu Val Ala Thr Pro His
370 375 380
Asn Thr Ser Lys Gly Phe Gln Arg Pro Val Tyr Leu Phe His Lys Ala
385 390 395 400
Arg Ser Pro Ser His
405

<210> 6107
<211> 896
<212> DNA
<213> Homo sapiens

<400> 6107
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120
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180
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240
tgggggagtt cagttggctc ggggttgctt tggcctgcca ccaggtggtc cacatgcccc
300
aggtggagga cggatgtgct gcctgctgac acaatagcgc ccaggagctg gttgctaccg
360
ctgtctgcta cgtaggtaga gagccaagct aggaccaagg ctagaatcag caccaccaca
420
cctgccacca ccatcacctc attaccaca ccctcaatga gggtgacatc agtgaccccc
480
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540
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600
ccaaaagcgg aaccttcgcc tcagaaaaag ggtgcgggac ccctcctcac cgtgcgggtca
660
cggtagcgac agggtagatc acaggctgag ggacagagca aagaccctg aggccggaca
720
cctgggggtcc tgccgggccc ctccccacga gagttccctg tgtctgtgcc aatcgttttc
780
gtctttcttt gccgcagttt cttttcctgt aaatcatggt taatgacatt aaccttctta
840
ccatcagggg ttagttgtgg ttgtgataaa taattactac cgttattaag caattg
896

<210> 6108
<211> 124
<212> PRT
<213> Homo sapiens

<400> 6108
Xaa Asn Leu Thr Arg Thr Val Met Arg Pro Gly Leu Gly Gly Arg Gln
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Gly Leu Ser Ser Asp Leu Arg Gly Ala Ser Gly Leu Leu Leu Pro Ala
20 25 30
Pro Ala Cys Leu Leu Gly Arg Pro Trp Met Ser Arg Arg Cys Ser Arg
35 40 45
Leu Gly Ser Thr Pro Pro Pro Ala Pro Ala Ser Pro Val Glu Ser Pro
50 55 60
Arg Pro Ser Pro Ala Ser Ser Ala Phe Ser Ser Leu Pro Ser Asp Gly
65 70 75 80
Trp Gly Ser Ser Val Gly Ser Gly Leu Pro Trp Pro Ala Thr Arg Trp